

MILITARY LEADERSHIP EVALUATIONS:  
EFFECTS OF SEX, LEADERSHIP STYLE AND GENDER-ROLE ATTITUDES

by

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# MILITARY LEADERSHIP EVALUATIONS: EFFECTS OF SEX, LEADERSHIP STYLE AND GENDER-ROLE ATTITUDES

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## ABSTRACT

Despite a recent increase in women holding leadership or managerial positions, women are still underrepresented in the highest levels of the military and business. One potential reason for this disparity might concern factors in leadership evaluation. In this study, the relationships among officer sex, leader sex, officer gender-role attitudes, leadership style and military leadership evaluations were examined with data collected from 108 male and 58 female United States Air Force Field Grade Officers. These officers evaluated the leadership performance of a military leader described in one of four vignettes. These descriptions portrayed either a male or female leader displaying one of two leadership styles, autocratic or democratic. In addition, officers completed measures assessing their gender-role attitudes toward the roles of men and women in society. For male officers, traditional views of women in society were significantly related to traditional views of men in society. Also, male officers reported significantly more traditional gender-role attitudes than female officers concerning men needing status, men not engaging in feminine activities and attitudes toward the role of women in society. With regards to leadership evaluations, male leaders who displayed a democratic leadership style tended to be rated significantly higher in leadership evaluations than autocratic male leaders. As for female leaders, the more non-traditionally the female officer thought about the roles of men and women in society, except for the belief that men need status, the significantly higher the ratings given to women occupying a leadership position. Contrary to predictions, female leaders were not rated significantly lower than male leaders, and there was no significant difference between the ratings

provided by male and female leaders. In addition, leadership style had no significant impact on leadership evaluations for female leaders. The implications of these findings for military leadership evaluations are discussed and suggestions for counseling psychologists working in these environments are offered.

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*The views expressed in this article are those of the author and do not reflect the official policy or position of the United States Air Force, Department of Defense, or the U.S. Government.*

## CHAPTER 1

### THE PROBLEM IN PERSPECTIVE

Since the 1970s, the United States (U.S.) has experienced a major increase in the number of women holding managerial positions. In 1970, the proportion of women in management positions was only 16% but rose to 26% in 1980 (U.S. Department of Labor, 1983). In 1990, the percentage of women managers was 39% (U.S. Department of Labor, 1998). This percentage rose to 46% in 1999 (Powell, Butterfield, & Parent, 2002). Despite this dramatic increase, women are still greatly underrepresented in the highest levels of management. For example, in 1998, the proportion of female corporate officers in Fortune 500 companies was 11.2%; that percentage shrinks to 3.8% for higher management positions [Chief Executive Officer (CEO), Chairman, Vice Chairman, President, Chief Operating Officer (COO), Senior Executive Vice President, and Executive Vice President]. Looking solely at the five highest titles of CEO, Chairman, Vice Chairman, President, and COO, women represent less than 1% of the officer holders (Catalyst, 1998).

This underrepresentation of women at the highest levels of leadership also holds for the United States military. As of March 2002, women officers represented 15.8% of all United States Army (USA) officers (USA, 2003). This percentage dropped to 12.8% for field grade officers (Major, Lieutenant Colonel, Colonel), and only 3.5% of flag officer positions (Brigadier General, Major General, Lieutenant General, General) were held by women officers. No women held the two highest ranks. Examination of data for the United States Navy (USN) reveals a similar pattern. Women officers comprised 15.2% of all naval officers in March 2002 (USN, 2003). This percentage dropped

to 14.0% for field grade officers (Lieutenant Commander, Commander, Captain) and was only 4.5% for flag officers (Rear Admiral—Lower Half, Rear Admiral—Upper Half, Vice Admiral, Admiral). No female officers held the highest flag officer rank (USN, 2003). The United States Marine Corps (USMC) had the lowest overall percentage (5.3%) of women officer as of March 2002 (USMC, 2003). Marine field-grade women officers (Major, Lieutenant Colonel, Colonel) comprised only 2.5% of officers, while only 1.2% of flag officer positions (Brigadier General, Major General, Lieutenant General, General) were held by women. No women held the three highest ranks. This trend was also seen in the United States Air Force (USAF), where women comprised 17.6% of all officers as of March 2002 (USAF, 2003). This percentage dropped to 13.5% for field grade officers (Major, Lieutenant Colonel, Colonel) and dropped further to 4.0% for flag officer rank (Brigadier General, Major General, Lieutenant General, General). No women held the highest rank of General (USAF, 2003).

In order to talk about this apparent barrier to upper management, Morrison and Von Glinow (1990) used the term “glass ceiling,” defined as “a barrier so subtle that it is transparent, yet so strong that it prevents women and minorities from moving up in the management hierarchy” (p. 200). They considered it a barrier for women as a group, barring individuals’ advancement simply because they are women rather than because they lack the ability to handle jobs at higher levels. Morrison and Von Glinow placed the glass ceiling at just below the general manager level. The U.S. Department of Labor (1991) defined the glass ceiling as “those artificial barriers based on attitudinal or organizational bias that prevent qualified individuals from advancing upward in their

organizations” (p. 1). Although the glass ceiling can exist at different levels in different settings, the term is typically used to suggest a barrier to entry into top-level management positions.

A variety of potential reasons have been offered for the “glass ceiling” barring women from the highest levels of leadership and management. Powell (1999) offered a summary of social-system centered, situation-centered, and person-centered explanations to account for the small proportion of women in the highest levels of management.

Social-system-centered explanations include patriarchal social systems, direct discrimination by the dominant group, and stereotypes of effective managers. Situation-centered explanations include: 1) decision makers’ preferences to work with people like themselves and use of gender-based schema when making hiring and promotion decisions for top management positions; 2) organizational practices in making such decisions; and 3) sex differences favoring men in developmental experiences at lower managerial levels such as challenging assignments, personal support, and access to mentoring. The social-system-centered and situation-centered explanations account for the glass ceiling as a barrier to the upward mobility of women in management hierarchies. In addition, person-centered explanations include: sex differences in task-oriented behavior, influence, and emergent leadership in groups; interests in jobs at top management levels; the effect of family responsibilities and corporate work-family initiatives; and inclinations to quit organizations and the corporate world when faced with a lack of career opportunities.

Another possible explanation for this “glass ceiling” preventing female representation at the highest levels of leadership is bias in performance evaluations. Leadership evaluation in organizations can be accomplished in numerous ways using a multitude of methods. Organizations and empirical studies have commonly assessed effectiveness by methods such as evaluative ratings of leaders’ performances by superiors, subordinates, peers, or leaders themselves, ratings of subordinates’ satisfaction with leaders, and measures of group and organizational productivity (Eagly, Karau, & Makhijani, 1995). According to Powell (1999), most organizations do not have a systematic procedure for making promotions to top management positions, handling each case on an ad hoc basis. Records of the promotional process are seldom kept. As a result, decisions about top management positions are relatively unstructured and unscrutinized, allowing decision makers’ biases to influence decisions.

Heilman (2001) suggested that the lack of structure does not force the consideration of multiple sources of information. Different elements of performance may be central in the evaluation of different individuals. Similar elements of performance may be given different weightings in the final judgments, and the standards for judging performance need not necessarily be uniform in their application. Similarly, Rice, Yoder, Adams, Priest, and Prince (1984) stated that the nature of leadership requires evaluation systems to rely heavily on subjective judgments for the measurement of many of the criteria upon which leaders are judged. The subjective nature of the criteria may open leadership evaluation systems to biases introduced by personal characteristics of both the rater and ratee. The first subjective criterion is the sex of the ratee.

## Leadership Evaluation

### *Sex of Ratee*

Concerning the upward mobility of women, the first important question is whether there are systematic differences in the performance evaluations given to men and to women. Many studies have examined this issue but have reached different, and oftentimes contradictory, conclusions. Some studies with business leaders have found no differences in evaluations of men and women. For example, in an early study, Tsui and Gutek (1985) studied 217 male and 78 female middle-level business managers, as well as 1,174 of their supervisors, subordinates, and peers. Participants completed measures to assess their perception of managers' performance effectiveness. Female managers were rated as favorably, if not more favorably, than their male counterparts. In addition, male and female managers obtained similar ratings in the organization's formal performance appraisal system. In a later study, Shore (1992) investigated the effects of ratee sex on evaluations of managerial potential within a corporate assessment center program. Between 1980 and 1985, 436 (375 men and 61 women) business employees were evaluated by assessment center personnel on their interpersonal skills, intellectual ability, and overall management potential. Women were rated higher than men on the performance-style skills; however, there were no differences in overall management potential ratings or in actual long-term job advancement. Investigating the effects of supervisor and subordinate sex on self and supervisory ratings in an organizational setting, Shore and Thorton (1986) recruited 70 male and female workers, as well as 38 male and female supervisors. Both the supervisors and the workers provided performance

ratings of the workers. Subordinates' self-ratings were higher than their supervisors' ratings, but worker sex did not impact the relationship between supervisory and self ratings.

Additionally, a number of studies involving undergraduate students have also yielded no significant differences in the leadership evaluations given to men and women. For example, Giannantonio, Olian, and Carroll (1995) studied the performance evaluations of managers to assess whether person-related or situation-related variables were related to judgments about these managers. A simulated interpersonal interaction between a manager and a subordinate was presented to 394 undergraduates. Results indicated that participant ratings were affected by the manager's leadership or communication style but not by the manager's sex. Likewise, in a study examining leader sex, leader style, and subordinate personality characteristics, Cellar, Sidle, Goudy, and O'Brien (2001) recruited 165 male and female undergraduates to watch a video of male and female managers leading marketing work groups and to rate their leadership effectiveness. No significant differences in leadership effectiveness ratings for male or female managers were found.

In addition to business and undergraduate studies, some researchers examining educational leaders found no sex differences in performance evaluations. Researchers in Spain (Lopez-Zafra & Del-Olmo-Ablanedo, 1999) examined the relation of sex, gender stereotypes, group identification, and evaluation of transformational and transactional leaders in 123 male and female teachers. Transformational leaders received higher evaluation marks than did transactional leaders, but this difference was independent of

the leader's sex. Finally, Thompson (2000) compared the leadership effectiveness of 57 male and female leaders as rated by 472 subordinate participants from lower, middle, and upper administrative levels in secondary and postsecondary institutions. The findings suggested that any differences in the perceived effectiveness of educational leaders were equally true for male and female leaders, and male and female educational leaders were perceived to be equally effective in their respective organizations.

Despite these aforementioned findings suggesting no differences, not all researchers have failed to find sex disparities in leadership evaluation. Two studies were found that indicated women receive higher leadership ratings than men. Peters (1984) asked 248 male supervisors to rate 290 male and 272 female store managers. In addition, 35 female supervisors were asked to rate 37 male and 38 female store managers. All participants worked for a large national retail convenience-store organization. Female store managers were rated higher than male store managers by their supervisors. Peters concluded that the significant main effect favoring women might reflect either bias or actual performance differences. "It could be that both male and female raters are equally biased against males (or 'for' females), or that both groups see the same actual differences in objective ratee performance. Objective unbiased performance data would be necessary in order to tease out these confounded explanations" (p. 351). Another study also suggested a bias for women leaders. To examine the overvaluation of female leaders, Wood (2000) asked 320 male and female college students to watch a film of a strong or moderately strong male or female leader in an extreme male sex-typed job. After watching the film, participants assessed the perceived masculinity/femininity of the

leader and rated the leader's performance. Female leaders were consistently rated higher on leadership performance than were male leaders.

While some studies have favored women, other studies have resulted in leadership ratings favoring men. In a study concerning characterizations of leaders (Heilman, Block, Martell, & Simon, 1989), 268 managers used an attribution inventory to rate one of seven target groups: men in general, male managers, successful male managers, women in general, female managers, successful female managers, or successful middle managers. Results indicated that men in general were described as more similar to successful managers than were women in general. Although the correspondence between descriptions of women and successful managers increased dramatically when women were depicted as managers, women continued to be seen as more different from successful managers than were men. Even when women were depicted as managers, there were still significant differences between perceptions of female managers and of successful managers. Only when female managers were specifically described as successful were they perceived as similar to successful managers in general.

In a similar study concerning ratee sex and performance level on performance ratings, Woehr and Roch (1996) recruited 269 university students to rate the performance of an average performer (male or female) alone or following a low or high performing context (masculine or feminine). Results indicated a significant contrast effect in the negative context condition. In other words, when an average performer follows a low performer, they are rated significantly higher than an average performer alone. With regard to ratee sex, the inflation of ratings in the negative performance context (negative

contrast effect) was significantly larger for male target ratees than for female target ratees. That is, when a male average performer follows a low performer, he was rated significantly higher than a female average performer following a low performer.

In consideration of these differing findings, researchers have conducted meta-analyses on studies involving leadership evaluation and effectiveness. Eagly, Makhijani, and Klonsky (1992) integrated 56 studies on the evaluation of women and men who occupied leadership roles. The characteristics of leaders were held constant, although the sex of the leader was varied. Although the meta-analysis showed only a small overall tendency for female leaders to be evaluated less favorably than male leaders, this tendency was more pronounced under certain circumstances. Specifically, women in leadership positions were devalued relative to their male counterparts when leadership was carried out in a stereotypically masculine style, particularly when this style was autocratic or directive. In addition, the devaluation of women was greater when leaders occupied male-dominated roles and when the evaluators were men.

In another meta-analysis, Eagly et al. (1995) aggregated over 73 organizational and laboratory experimental studies to examine the perceived relative effectiveness of women and men who occupy managerial and leadership roles. In this analysis, male and female leaders were found to be equally effective. Men, however, were viewed as more effective than women in roles that were defined in more masculine terms, while women were viewed as more effective than men in roles that were defined in less masculine terms. Also, men were more effective than women to the extent that leader and subordinate roles were male-dominated numerically.

Given the divergent research findings on leadership evaluations of men and women, further research is needed to understand how potentially moderating variables relate to leadership evaluation. Three potential moderating variables are rater sex, evaluation context, and leadership style.

#### *Sex of Rater*

Only a few studies have specifically examined the effect of rater sex on the performance evaluations of male and female managers. Although some studies have examined the relationship between rater sex and performance evaluations of individuals in nonmanagerial roles, little definitive evidence for rater sex differences has been found. In one such study, Mobley (1982) analyzed performance appraisals of 1,035 nonmanagerial employees of a large supply organization for effects of employee and supervisor race and sex. Female employees were rated higher than were males, but there was no significant difference due to the sex of the rater. In a related study, Pulakos, White, Oppler, and Borman (1989) analyzed the official ratings of more than 8,000 first-term enlisted Army personnel. Female raters gave higher ratings than did male raters. There were also significant interactions with ratee sex and/or rating source (peer or supervisor), but the researchers reported that the sex effects were minimal.

In a similar study evaluating rater sex and leader evaluations, Shore and Thornton (1986) investigated the effects of supervisors' and subordinates' sex on self and supervisory ratings in a large electronics manufacturing company. Participants included 70 male and female assemblers and 38 male and female supervisors. Results from job performance appraisal questionnaires indicated that subordinates' self-ratings were higher

than their supervisors' ratings of them and that ratees' sex did not affect the relationship between self and supervisory ratings. Even though researchers have found no rater sex differences in nonmanagement performance evaluations, the same may not hold for management or leadership evaluations.

A limited number of studies have examined the relationship between leadership evaluation and rater sex in the context of management. Deal and Stevenson (1998) recruited 702 male and female college students to examine the effect of student sex on perceptions of male managers, female managers, and prototypical managers. In general, male and female students agreed more in their perceptions of prototypical managers and male managers than of female managers; however, male students were more likely than female students to have negative views of female managers. "The results indicate that negative perceptions of female managers are largely a function of the sex of the perceiver, rather than the sex of the manager being evaluated" (p. 297). In another management study, Luthar (1996) recruited 130 female and 160 male undergraduate business seniors to read a business case and to answer a survey assessing the performance and leadership ability of the general manager. Male students tended to evaluate other male managers higher, while female students were partial to female managers in their evaluations. Although these two studies differed on how women raters responded to male leadership (the first study showing female leader preference and the latter showing no preference), both studies indicated that male raters devalue women in leadership evaluations.

Eagly et al. (1992) suggested one hypothesis why leadership evaluations might be prejudiced by the sex of the rater. “Because placing women in leadership positions upsets the traditional societal gender hierarchy, male subjects might, in a sense, have more to lose by approving female leadership because their status vis-à-vis women would decline. Thus, male subjects may be more prone than female subjects to reject female leaders” (p. 7). This statement suggests that not only the sex of the ratee and the sex of the rater affect leadership evaluations, but there also exist some traditional gender attitudes that may lead to differential evaluations of male and female leaders.

#### *Gender-Role Attitude*

In order to understand how gender-role attitudes might impact perceptions, Bem (1981) proposed the Gender Schema Theory. She defined a schema as “a cognitive structure, a network of associations that organizes and guides an individual’s perception. A schema functions as an anticipatory structure, a readiness to search for and to assimilate incoming information in schema-relevant terms. Schematic processes is thus highly selective and enables the individual to impose structure and meaning onto the vast array of incoming stimuli” (p. 355). Given that schemas help individuals process information, how does information about the roles of men and women in society impact this process?

To begin, it is important to draw a distinction between sex and gender role. Sex can be defined as a discrete typology based on biological composition. Given this definition, people can be biologically categorized as either male or female. In contrast to this biological distinction, gender roles are social constructs that refer to culturally

accepted cognitions, feelings, and behaviors related to internalizations of masculinity and femininity (Bem, 1993). How then do individuals internalize gender-roles? Bem acknowledged that all societies allocate adults roles on the basis of sex. Boys and girls are expected to acquire sex-specific skills and self-concepts that are masculine or feminine as defined by their particular culture. In addition to learning such content-specific information, children also learn to evoke a network of sex-related associations in order to evaluate and process new information. The child learns to process information in terms of an evolving gender schema.

According to Gender Schema Theory, gender schemas involve a generalized readiness to process information on the basis of sex-linked associations. Bem (1981) suggested that gender schematic processing can manifest itself in a number of ways. “Individuals who have a generalized readiness to process information in terms of a particular schema should be able to encode schema-consistent information quickly; they should organize information in schema-relevant categories; they should make highly differentiated judgments along schema-relevant categories; and when given a choice, they should spontaneously choose to make discriminations along those same dimensions” (p. 355). The gender schema contains information about many aspects of men and women in a given society. “In most societies, this is a diverse and sprawling network of associations encompassing not only those features directly related to male and female persons, such as anatomy, reproductive function, division of labor, and personality attributes, but also features more remotely or metaphorically related to sex, such as the angularity of roundedness of an abstract shape and the periodicity of the moon” (p. 354).

Along with general information about men and women, gender-role schema consists of specific information about male and female behavioral characteristics.

Bem (1974) posited that gender-role schema is comprised of two types of human behavioral characteristics: feminine and masculine traits. Traditional feminine traits include: affectionate, cheerful, compassionate, eager to soothe hurt feelings, gentle, sensitive to the needs of others, soft spoken, warm, and yielding. Traditional masculine traits include: acting like a leader, aggressive, ambitious, athletic, competitive, dominant, forceful, and makes decisions easily. “In general, masculinity has been associated with an instrumental orientation, a cognitive focus on ‘getting the job done,’ and femininity has been associated with an expressive orientation, an effective concern for the welfare of others” (p. 156). Previously, Bem and Bem (1970) noted that women were traditionally expected to have homogenous goals of marriage and children and a traditional career such as being a secretary, nurse, or teacher. Certainly, these roles appear congruent with the traditional feminine traits listed above. Bem’s (1979) femininity and masculinity descriptors appear to put men in heroic leadership positions while women appear to hold supportive roles.

To describe a system of traditional values and beliefs that rigidly define optimal masculinity, O’Neil (1981) coined the phrase “masculine mystique and value system” (p. 203). Citing numerous studies, O’Neil developed the following list of traditional assumptions that underlie the masculine mystique: 1) Men are biologically superior to women and, therefore, have greater human potential than women; 2) Masculinity, rather than femininity, is the superior, dominant, more valued form of gender identity; 3)

Masculine power, dominance, competition, and control are essential to proving one's masculinity; 4) Vulnerabilities, feelings, and emotions in men are signs of femininity and to be avoided; 5) Interpersonal communication that emphasizes human emotions, feelings, intuitions, and physical contact are considered feminine and to be avoided. Rational-logical thought rather than intuitive and emotional expressions is the superior form of communication; 6) Sex is primarily a means to prove one's masculinity. Affectionate, sensual, and intimate behavior are considered feminine and less valued; 7) Vulnerability and intimacy with other men are to be avoided because (a) a man cannot be vulnerable and intimate with a male competitor because he may be taken advantage of, and (b) intimacy with other men may imply homosexuality or effeminacy; 8) Men's work and career success are measures of their masculinity; and 9) Men are vastly different and superior to women in career abilities; therefore, men's primary role is that of breadwinner or economic provider; women's primary role is that of caretaker of home and children.

How are these traditional gender-role attitudes related to occupations?

In a study of gender stereotypes and occupations (Cejka & Eagly, 1999), 189 male and female college students were asked to rate 80 occupations on gender-stereotypic attributes and to rate either the average woman or the average man on the same attributes. To the extent the occupation was female dominated, feminine personality or feminine physical attributes were thought more essential for success; to the extent the occupation was male dominated, masculine personality or masculine physical attributes were thought more essential. Further supporting traditional gender-roles, occupations had higher prestige if the students believed that the occupations required masculine personality or

cognitive attributes. In addition, occupations were rated as having higher earning potential to the extent they were thought to require masculine personality attributes. How does the endorsement of traditional gender-role attitudes impact the perceptions of leaders and managers in society?

Powell and Butterfield (1979) examined the gender-role attitudes associated with the role of a manager in the 1970s. Researchers asked 574 undergraduates and 110 graduate business students to describe a “good manager” by using the Bem Sex-Role Inventory (BSRI; Bem, 1974). Powell and Butterfield hypothesized that a prototypical “good manager” would be described as androgynous or encompassing both masculine and feminine traits. Contrary to expectations, they found that the prototypical good manager was firmly conceived as masculine. In the 1980s, Powell and Butterfield (1989) reexamined the issue of the “good manager,” this time using the revised BSRI (Bem, 1981) with 199 undergraduates and 126 graduate business students. The revised BSRI cut the number of items for each dimension down because several of the original feminine items were considered highly undesirable. Powell and Butterfield reasoned that the negative nature of these feminine items might have lowered the overall feminine scores, thereby reducing the likelihood of finding an androgynous description. Analyzing new data and reanalyzing their original data based on the revised items, Powell and Butterfield still found not only a predominantly masculine view of a good manager, but one that was more strongly held than in their previous study.

Noting the increase of women holding managerial positions during the 1990s, Powell et al. (2002) wondered whether there had been a corresponding change in men’s

and women's stereotypes of managers. Data from 206 undergraduates and 142 part-time graduate business students collected in 1999 were compared to data from their 80s sample, as well as their 1970s sample. Results indicated that although the latter cohort had managerial stereotypes placing less emphasis on masculine characteristics than in earlier studies, a good manager was still perceived as predominately masculine across all the studies.

In a similar study, Heilman, Block, and Martell (1995) examined whether traditional stereotypic discrepancies in the characterizations of women and men persist when they are depicted as managers. Two hundred twenty-four male managers completed an attribute inventory describing either men or women in general, men or women managers, or men or women successful managers. Although characterizations of women on male-stereotyped attributes were more favorable when they were depicted as managers than when depicted in general terms, female managers were characterized more negatively than were male managers. Only when women were designated as successful managers did the majority of discrepant characterizations of stereotypically male attributes abate. In summary, managers were characterized as masculine and were perceived to require masculine traits for success. Based on this traditional gender-role attitude regarding managers, how will women be evaluated in the role of manager or leader?

Hartman, Griffeth, Crino, and Harris (1992) studied 158 male and 162 female undergraduates to examine the impact of rater sex, ratee sex, gender stereotype of the job, and gender stereotype of the ratee's personal characteristics on a promotion decision.

Participants received a list of personal characteristics of either a male or female ratee, along with a detailed job description of either a word processing supervisor (female job) or of an installation supervisor (male job). Participants were then asked to decide if their ratee was eligible for promotion. Female employees with masculine characteristics were evaluated as most promotable regardless of the gender stereotype of the job or the sex of the rater. Raters selected ratee personal characteristics as the factor that most influenced their promotion decisions. It was primarily the gender stereotype of the ratee's personal characteristics, rather than the ratee's sex, that influenced the promotion process. The link between gender-role attitude and performance evaluation was apparent even when the ratee and rater were both women.

In a related study, McGlashan, Wright, and McCormick (1995) considered the link between preferential selection and the evaluation of female leader performance. In their study, 135 male and female undergraduate students completed a mock class-scheduling task led by a female confederate who was chosen either preferentially or by merit. Contrary to their hypothesis, subordinate evaluations of leader performance were not affected by preferential selection but were significantly related to degree of non-traditional views held toward female managers. The more non-traditional a students' gender-role attitude toward women in business, the higher the female manager's performance rating. There was a direct link between the gender-role attitude of the raters and their performance evaluations of women managers.

In a study of women only, Cooper (1997) examined whether nontraditional female leaders, compared to traditional female leaders, were more assertive, more

positive in their attitudes toward female leadership, and more positive in their response to nontraditional leaders. Eighty undergraduate women were placed in groups with nontraditional and traditional female leaders and assigned a simple sorting task. Results indicated that (a) nontraditional women evaluated female leadership in general more positively than did traditional women, (b) traditional women responded more positively to their own experience of traditional leadership than did nontraditional women, and (c) nontraditional women responded more positively to their own experience of nontraditional leadership than to traditional leadership.

In summary, these studies indicate that gender-role attitudes about the roles of men and women in society impact how they are rated in leadership roles. These preferential attitudes apply not only to the roles of men and women in society but also likely apply to the expected behaviors of individuals in these roles.

### *Leadership Style*

The final moderator impacting sex differences in leadership evaluations involves the leadership styles of men and women leaders. To begin, Eagly, Wood, and Diekman (2000) summarized two aspects of gender roles that are especially relevant to understanding masculine and feminine leadership styles: agentic and communal attributes. Agentic characteristics, which are ascribed more strongly to men, describe primarily an assertive, controlling, and confident tendency (aggressive, ambitious, dominant, forceful, independent, daring, self-confident, etc.). In employment settings, agentic behaviors might include speaking assertively, competing for attention, influencing others, initiating activity directed to assigned tasks, and making problem-

focused suggestions. Communal characteristics, which are ascribed more strongly to women, describe primarily a concern with the welfare of other people (affectionate, helpful, kind, sympathetic, interpersonally sensitive, nurturing, etc.). In employment settings, communal behaviors might include speaking tentatively, not drawing attention to oneself, accepting others direction, supporting others and contributing to the solution of relational and interpersonal problems.

Early in the research on leadership styles, Bales (1950) provided another framework to distinguish between masculine and feminine approaches to leadership: task-oriented and interpersonally-oriented styles. The task-oriented approach encompasses a concern with accomplishing assigned tasks by organizing task-relevant activities, while the interpersonally oriented style involves a concern with maintaining interpersonal relationships by tending to other's morale and welfare. In this paradigm, task-oriented style, labeled initiation of structure, included behavior such as encouraging subordinates to follow rules and procedures, maintaining high standards of performance, and making leader and subordinate roles explicit. Interpersonally-oriented style, labeled consideration, included behavior such as helping and doing favors for subordinates, looking out for their welfare, explaining procedures, and being friendly and available. Task-oriented activities tend to be viewed as masculine, while interpersonally-oriented activities tend to be viewed as feminine.

Still another, more narrow aspect of gender differentiated leadership style is the extent to which leaders behave democratically (allow subordinates to participate in decision making) or autocratically (discourage subordinates from participating in

decision making). This dimension of democratic versus autocratic leadership (or the similar dimension of participative versus directive leadership) follows from early experimental studies of leadership style (Lewin & Lippitt, 1938). Although the democratic or autocratic styles are a narrower aspect of leader behavior than are task-oriented or interpersonally-oriented styles, the democratic-autocratic dimension also relates to gender roles, because one component of the agentic norms associated with these roles is that men are relatively more dominant and controlling—in other words, more autocratic and directive—than women are.

In order to understand how leadership style might differentially impact leadership evaluations for men and women, Eagly et al. (1992) introduced the concept of gender-role congruency, defined as the extent to which leaders behave in a manner that is congruent with gender-role expectations. Specifically, women can adopt a leadership style that is relatively feminine and, therefore, congruent with their gender role, or they can adopt a leadership style that is relatively masculine and, therefore, incongruent with their gender role. The gender-role congruency of female leaders' behavior potentially influences the degree to which they experience role conflict and violate other people's expectations about their behavior. To the extent that women lead in a feminine style, they may largely escape the role conflict that they would otherwise experience in leadership and managerial roles and may not, therefore, be subjected to the negative evaluations that they would otherwise receive. In contrast, to the extent that women lead in a masculine style, they may exacerbate their role conflict and increase the likelihood of receiving unfairly negative evaluations of their performance. A straightforward application of the

congruency principle would suggest that men would elicit negative evaluations when leading in a feminine style. Male leaders, however, do not likely face a basic role conflict parallel to the conflict that women face in their dual status as women and leaders. Given that leadership by men is ordinarily perceived as legitimate, the details of their performance are less likely to be questioned, given a generally satisfactory level of competence. Therefore, as a consequence of the consensual belief that men have a right to lead, they may enjoy greater latitude to carry out leadership in a variety of masculine and feminine styles. A number of studies have tested the congruency hypothesis across many of the leadership styles previously mentioned.

Many studies examining task-oriented/initiating structure (masculine) versus interpersonally-oriented/consideration (feminine) styles have found support for the gender-role congruency hypothesis. In an early study examining initiating structure (masculine) versus consideration (feminine) styles, Bartol and Butterfield (1976) investigated the extent to which sex role stereotypes influence the evaluation of leadership behavior. Participants, 225 male and 57 female business students, were administered one of two versions of a questionnaire containing four stories. Each story depicted a style based on one of the following leadership dimensions: initiating structure, consideration, production emphasis, and tolerance for freedom. Managers' names were altered in the two versions to indicate either a man or woman. Answers to eight evaluative questions for each of the leadership styles confirmed the hypothesis that sex has an effect on evaluations of managerial behavior, although the effect varied for the different leadership styles. Consistent with the congruency hypothesis, female managers

received more positive scores than did male managers on the consideration style.

Likewise, initiating structure behavior was valued more highly when engaged in by male managers.

In a more recent study examining structuring (masculine) versus consideration (feminine) styles, Cann and Siegfried (1990) assessed the correspondence between gender stereotypes of behavior and dimensions of effective leadership. They conducted two studies with a total of 28 male and 43 female undergraduates. In the first study, participants rated 36 sex-typed traits on a scale ranging from “more like consideration” to “more like structuring.” In the second study, participants rated 20 leader behaviors on a scale ranging from masculine to feminine. In support of the congruency hypothesis, consideration behaviors were perceived to be feminine, while structuring behaviors were perceived to be masculine. Qualities that characterize the masculine gender role were perceived to be consistent with structuring, while qualities associated with the feminine gender role were perceived to be consistent with consideration.

In a related study, Rojahn and Willemsen (1994) studied task-oriented (masculine) and interpersonally-oriented (feminine) styles of leadership. Participants, 342 female and 154 male undergraduates, read a narrative about a small-task group. Narratives described either male or female leaders and utilized either a task-oriented or a socio-emotional style of leadership. The gender-role congruency hypothesis was supported by the data from male participants only and then only for the effectiveness measures.

Not all studies examining consideration (feminine) vs. structuring (masculine) styles have supported the gender-role congruency model. Lee and Alvares (1977) examined the effect of subordinate and supervisor sex on the description and evaluations of supervisory behavior. Participants, 64 male and 64 female subordinates (undergraduates), participated in a laboratory simulation of an industrial task in which male and female supervisors (also undergraduates) were trained to exhibit specific supervisory behaviors (consideration vs. structure). Subordinates described the behavior of the supervisor and evaluated his or her performance. In general, no differences were found in the descriptions and evaluations as a function of the sex of the supervisor, except in the case of the high consideration-high structure style. In this case and not supportive of the congruency hypothesis, male supervisors were described as lower in initiating structure than were female supervisors. Additionally, female subordinates described the same supervisors as being higher in consideration than did male subordinates.

Like many studies already reviewed, a study specifically examining authoritarian (masculine) versus democratic (feminine) leadership styles has also supported the gender-role congruency hypothesis. In this study, researchers (Anderson, Finn, & Leider, 1981) varied leadership style against a leader's title (Mr., Ms., Miss, Mrs.) in a simulated small group case study. Participants, 374 college and high school students, read a case study and rated their reaction to the leaders on behavior differential factors of "subordination" and "friendship." These ratings indicated significant effects for leader style (i.e., greater subordination and stronger friendship attraction to democratic than to authoritarian leaders). Although the leader's title produced no significant main effects, there was a

significant interaction. In support of the gender congruency model, democratic leaders using the title Ms. evoked greater willingness to follow than did authoritarian leaders using the Ms. title.

A few studies of autocratic (masculine) versus democratic (feminine) leadership styles have not supported the gender-role congruency model. For example, Kushell and Newton (1986) analyzed the effects of sex and leadership style on subordinate satisfaction. Participants, 72 male and 72 female undergraduates, were evenly divided among four groups reflecting either a male or female leader displaying either an autocratic or democratic leadership style. The groups performed a decision-making exercise and later answered a questionnaire indicating their satisfaction with their leader, their own performance, and their group's decisions. While participants were more satisfied in democratically led groups, contrary to the congruency hypothesis, sex of leader did not significantly affect satisfaction.

In a more recent study, Luthar (1996) studied the impact of autocratic and democratic leadership styles on the perception of how well male and female managers perform, as well as the leadership ability attributions made to them. One hundred thirty female and 160 male undergraduate business seniors read a business case and answered a survey assessing the performance and leadership ability of the general manager. In general, democratic managers were perceived to be much higher performers when compared to autocratic managers. The gender congruency hypothesis was not supported in that the autocratic female managers were perceived to be higher performers than autocratic male managers.

Given these varied results, researchers have conducted meta-analyses taking into account leadership styles and leadership evaluations. Eagly and Johnson's (1990) meta-analysis of 161 studies comparing the leadership styles of women and men included studies that assessed both task/interpersonally oriented styles, as well as autocratic/democratic styles of leadership. Overall and in contrast to the expectation that women lead in an interpersonally-oriented style and men in a task-oriented style, results indicated that female and male leaders did not differ in their displayed leadership style in organizational studies. Displayed leadership style, however, was somewhat gender stereotypic in two other types of leadership studies, namely laboratory experiments and assessment studies. In these latter studies and consistent with stereotypic expectations, women tended to adopt a more democratic style and men a more autocratic style. This sex difference appeared in all three types of leadership studies, including those conducted in organizations. Given that the democratic/autocratic leadership style produced the most pronounced sex difference, this dimension was examined further in a meta-analysis of leadership evaluations.

As noted previously, Eagly et al. (1992) integrated 56 studies examining gender and the evaluation of leaders. Although the meta-analysis showed only a small overall tendency for female leaders to be evaluated less favorably than male leaders, this tendency was more pronounced under certain circumstances. Specifically, women in leadership positions were devalued relative to their male counterparts when leadership was carried out in a stereotypically masculine style, particularly when this style was autocratic or directive. The authors suggested that this devaluing stems from gender-role

incongruency or women adopting a masculine leadership style that violates a traditional gender role expectation. They reasoned that autocratic/directive leadership on the part of women might be especially disruptive to traditional patterns of deference between men and women. Proceeding in a participative and collaborative mode in accomplishing managerial tasks may enable many female managers to win acceptance from initially skeptical subordinates and thereby remove one barrier to effectiveness. Because male leaders are not ordinarily constrained by subordinates' and colleagues' negative attitudinal bias, they are freer to lead in an autocratic and nonparticipative manner. This argument suggests that the tendency to evaluate female leaders more negatively than male leaders should be especially strong when women lead in an autocratic, directive style.

#### Military Leadership Evaluation

As noted previously, leadership evaluation in organizations can be accomplished in numerous ways using a multitude of methods. Thomas (1987) highlighted four major differences between civilian and military evaluation systems. First, military officers are numerous and geographically mobile. While the first draft of an evaluation is prepared by an immediate supervisor, it is signed by the commanding officer. Even though commanding officers may have no first hand interaction with the officer being evaluated, they must make critical personnel decisions about the career (i.e., promotion, transfer, special assignment, separation) of the subordinate officer. Second, officers are educated, dedicated, and well-trained so motivation and discipline need not be a goal of the evaluation system. Third, potential, not just past performance, is a vital part of military

evaluations. Future value to the organization is usually indicated by the rater through a summary of relevant personality traits, a discussion of outstanding performance during the rating period, and recommendations for career-enhancing assignments. Fourth, the military is a closed system in that all openings are filled from within. This fact, along with an “up” or “out” policy, promotes inflation of quantitative and qualitative judgments appearing in appraisals. In the narrative portion of evaluations, inflations result in common words losing their usual meanings and proliferations of officers who all but “walk on water.”

Thomas (1987) also described some specific aspects of military evaluation that might be prone to subjective biases. The evaluations require raters to write comments on an officer’s overall leadership ability, personal traits not listed in the rating blocks, estimated or actual performance in combat, and unique skills and distinctions that may be important to career development and future assignments. Although the ratings are intended to be objective, “critical decisions about the careers of officers are often based on qualitative, subjective material” (p. 89). Thomas argued that this subjective material is vulnerable to the influence of personal biases and stereotypes, particularly when personality traits are being discussed. Moreover, Thomas submitted that there is no assurance that a well-written, unbiased evaluation will be interpreted “without regard to gender, race, ethnicity, and so on when the task of the reader is to infer the significance of subtleties” (p. 89). Given the subjective nature of these reports, how might the factors examined previously in civilian performance ratings (sex of ratee, sex of rater, leadership style and gender-role attitude) be related to military leadership evaluation?

*Military Leadership Evaluation and Sex of Ratee*

As was the case with civilian leader evaluations, the first important question concerns whether there are systematic differences in the evaluations given to men and to women in military settings. Many studies examining these sex differences occurred in the early 1980s, when women were first integrated into U.S. military academies. Adams (1984) examined the leadership ratings and personality variables at the United States Military Academy (USMA) for the classes of 1980, 1981, and 1982 (the first three classes with women cadets). Leadership ratings during Cadet Basic Training were correlated with physical, attitudinal, personality, and demographic factors. For both men and women, physical prowess, positive attitudes toward physical activity, and a masculine self-image were the factors most associated with high leadership ratings.

Also at USMA, Rice et al. (1984) examined ratings of leadership ability for 1096 male and 91 female cadets. For two of the three rating periods, men were rated significantly higher than women. Physical ability and performance were most highly correlated with leadership ratings during the summer training camp, while academic ability and performance were most highly correlated with these ratings during the academic year. There was a general trend to rate female cadets lower than male cadets. This study did not distinguish between male and female raters, but, as noted earlier, the sex of the rater may impact leadership evaluations in military settings.

*Military Leadership Evaluation and Sex of Rater*

Mohr, Rowan, and Reidy (1978) examined leadership ratings of male and female Reserve Officer Training Corps (ROTC) cadets. While 83 female cadets were rated lower

than were the 392 male cadets on leadership performance by their platoon officer evaluators, ratings by noncommissioned-officer evaluators did not differ for male and female cadets. Although female cadets scored lower than did the male cadets on the most physically demanding exercises, they scored as well or better on exercises emphasizing cognitive and motivational abilities. Despite this parity of ratings from experienced observers and objective tests, male and female peers systematically rated women lower on their leadership performance. In a similar study, Mohr and Downey (1977) investigated possible bias in peer ratings as a function of the sex of the rater and of the person rated within the context of the U.S. Army. Results of peer and self-ratings of leadership potential completed by 10 female and 30 male newly commissioned 1<sup>st</sup> and 2<sup>nd</sup> lieutenants indicated that female officers were rated significantly lower by both male and female peers. This finding supports prior research on the devaluation of women leaders, but this study goes on to examine differences in the sex of the rater. Specifically, while male self-ratings of leadership potential were significantly related to both male and female peer ratings, female self-ratings were not related to either male or female ratings. In other words, female lieutenants rated themselves as more effective than did either their male or female peers. In summary, studies examining rater sex found that both male and female raters rated female leaders significantly lower than male leaders on leadership assessments. As stated earlier, a quality of the rater beyond their sex, namely their gender-role attitude, also potentially impacts the ratings given to male and female leaders.

*Military Leadership Evaluation and Gender-role Attitudes*

As noted previously, Bem (1974) suggested that gender-role schema is comprised of two categories of human traits: feminine and masculine traits. If an individual's gender schema expects men and women to act according to traditional masculine and feminine traits, respectively, then the individual has a traditional gender-role attitude. If a person's gender schema allows men and women to display both traditional masculine and feminine traits, then he or she has a nontraditional gender-role attitude. Are military members more or less traditional than their civilian counterparts and how might a difference be related to leadership evaluations?

Not surprisingly, the majority of research in this area focused on the integration of women at the U.S. military academies in the late 1970s and early 1980s. Priest, Vitters, and Prince (1978) examined the gender-role attitudes of the first sex-integrated class at USMA. In attitudes toward sex roles, marriage, and childrearing, female cadets held less traditional views than male cadets. Over time, male cadets' attitudes toward women's roles became significantly more traditional, and by the end of the first year, male cadets reported changing their attitudes about the admission of women in a negative direction.

Adams (1984) also studied the attitudes toward women for the USMA classes of 1980, 1981, and 1982 (the first three classes with women cadets). In most cases, the data included all of the cadets in the population (over 4,000 male and female respondents). The results indicated that for each entering class, male cadets held significantly more traditional gender-role attitudes than did female cadets. The results also indicated that the male cadets in the Class of 1982 were more egalitarian toward women's gender roles than

were male cadets in the previous two classes. In addition, the degree of difference in gender-role attitude between men and women showed a decline over the three classes.

Stevens and Gardner (1987) also researched attitudes toward women in the military at the U.S. Coast Guard Academy. Their sample included 16 female and 112 male cadets, along with 68 female and 26 male undergraduates from a small civilian college in New England. The 55 statements on the Attitudes Toward Women Scale (AWS: Spence & Helmreich, 1972) were used in combination with 17 questions assessing attitudes toward women in the military (ATWM: Larwood, Glasser, & McDonald, 1980). Male cadets reported a significantly more negative view of women in the military than did the other three groups: civilian males, civilian women, and Coast Guard Academy women. Indeed, across both institutions, male responses were significantly more negative about women in the military than were female responses across both institutions.

Studying at the United States Naval Academy (USNA) from October 1976 to May 1977 (the first year women were admitted to the USNA), Durning (1978) also explored attitudes toward women. In this study, 67 female and 993 male cadets participated. At the end of the first year, women had a slightly lower average academic rank than did men, and their attrition rate was about twice that of men. Although male attitudes changed favorably in regard to women's fitness for command and their ability to stand the stress of combat, most men still preferred keeping the academy all male.

At about the same time as the Durning study, DeFlueur, Gillman, and Marshak (1978) examined the gender-role attitudes of cadets at the United States Air Force

Academy (USAFA) and students at the University of Texas (UT). Male upper-class cadets had significantly more traditional attitudes about women's roles than did male undergraduates at UT. DeFlueur et al. also examined the gender-role attitudes of the 1980 USAFA entering class, the first class to include women cadets. Comparable with upperclass cadets, the attitudes of entering male cadets were found to be significantly more traditional than those of males at UT. In contrast, female cadets were significantly less traditional than male cadets but did not differ significantly from their female counterparts at UT. In summary, male military cadets held more traditional attitudes than their civilian peers, while female military cadet attitudes did not significantly differ from their civilian peers.

In a follow-up study, DeFlueur and Gillman (1978) returned to the first sex-integrated USAFA class to assess any changes in gender-role attitudes. In this sample, 200 male and 157 female cadets were matched on family military history and a composite academic score. Female cadets' attitudes toward women in society and women at USAFA were not significantly different after six months of training; however, their attitudes toward women military leaders changed somewhat in a non-traditional direction during this period. This change, however, was not significant. Male cadet attitudes toward women shifted in the traditional direction, but again this shift was not significant. When comparing the two groups, female cadets had significantly more non-traditional attitudes about women than did male cadets.

In summary, the studies examining sex integration at military academies found that males expressed more traditional gender-role attitudes, while females expressed

more nontraditional gender-role attitudes. Additionally, military academies were not the only military institutions where this trend was evident.

At an Army ROTC detachment, Larwood et al. (1980) examined the attitudes of male and female cadets toward the movement of women into nontraditional and leadership positions in the military. Participants included a group of 22 female and 247 male cadets at a ROTC summer training camp, along with 28 female and 102 male cadets in a sexually-integrated ROTC unit. As compared to men, women reported feeling more positive toward women in superior, peer, subordinate, and general leadership roles. The time spent in sexually-integrated, school-year ROTC units did not appear to influence opinions, while experience of the integrated, summer-training camp produced more negative attitudes on the part of men.

In a more recent study, Robinson Kurpius and Lucart (2000) compared military and civilian undergraduates on attitudes toward women, masculine gender-role attitudes, and authoritarianism. Participants included 113 male and 69 female students at USNA, USAFA, ROTC, and a civilian institution. Military students had the most traditional authoritarian beliefs and gender-role attitudes. ROTC cadets were the most traditional in authoritarianism and in men needing status beliefs. All military-affiliated men held more traditional attitudes about men needing to be tough than did civilian men. USNA men had the most traditional attitudes toward women as compared to the USNA females and civilian men and women. When men only were analyzed, USNA males were the most traditional in their attitudes toward women and in antifemininity attitudes. This last statement is unique because few studies have examined the gender-role attitudes of men

toward men. In this instance, USNA male midshipmen reported the highest antifemininity attitudes, or in other words, these midshipmen held to very traditional attitudes for fellow male midshipmen.

In summary, across all the military studies, male military cadets/midshipmen tend to hold more traditional gender-role attitudes as compared to female military cadets/midshipmen or civilians. This leads to the question of whether these traditional gender-role attitudes relate to the role of military leader?

As noted previously, O’Neil (1981) coined the phrase “masculine mystique and value system” (p. 67) to describe a system of traditional values and beliefs that rigidly define optimal masculinity. Arkin and Dobrofsky (1978) discussed the connections between military socialization and masculinity. “The military represents not only the primary traditional sex-role identity for American men, but it has been the instrumental force of socialization for this identity. Through relative physical isolation, community insulation, and behavior modification, the traditional prototype of masculinity is molded by the military in the belief that war and military are masculine domains, and, as inherently masculine domains, success is dependent upon the degree to which the military person conforms to the defined archetypes” (p. 166). Traditional gender-role attitudes cast military service as an exclusively masculine domain.

In a more recent article, Dunivin (2000) introduced the “Combat, Masculine-Warrior” paradigm to illustrate the links between military service and masculinity. At the center of this model is the masculine-warrior image, which pictures soldering as a masculine role with accompanying masculine norms, values, and lifestyles. Additional

components of this model support conservatism, homogeneity of a predominately male force, and exclusion of women in combat roles. This masculine view of the military extends into the perceived appropriateness of certain military positions for women.

For example, in a study examining beliefs about the appropriateness of military jobs for women, Savell, Woelfel, Collins, and Bentler (1979) presented 540 men and 181 women (401 officers and 320 enlisted) with a list of 24 jobs and asked if each was appropriate for women. Across all participants, lower frequencies of endorsement for nontraditional jobs (e.g., welder, diesel mechanic, rifle-carrying infantry foot soldier) and higher frequencies of endorsement for traditional jobs (e.g., cook, human relations officer, radar technician) were found. Only one (rifle-carrying infantry foot soldier) was consistently judged by the majority of respondents to be inappropriate for women. In six cases (company commander in a mixed-sex company, military police guard duty, helicopter pilot, jet pilot, bomb disposal specialist, and rifle-carrying infantry foot soldier), women judged the job appropriate for women more often than the men did, while in three cases (statistician, bartender, and butcher) the opposite occurred. In summary, men and women held similar beliefs about traditional occupations but differed in their perceptions of a few nontraditional occupations. Of particular interest was the perception of the only leadership role (company commander), which was rated appropriate for women by women but inappropriate for women by men.

More recently, Boldry, Wood, and Kashy (2001) examined the gender-role attitudes toward military leadership with Texas A&M cadets. Researchers recruited 353 male and 27 female members of the Corps of Cadets. As a pre-test, 25 cadets (12 female

and 13 male) were asked to imagine a typical male cadet, a typical female cadet, the ideal female cadet, and the ideal male cadet and rate that cadet on 14 different personality traits. Those traits included integrity, selfishness (reversed), tactfulness, dedication, physical fitness, leadership, respectfulness of authority, diligence, self-confidence, arrogance (reversed), motivation, masculinity, femininity, and emotional expressiveness. The remainder of the cadets rated themselves and each member of their unit on the set of 14 traits. Results showed that in comparison to an imagined typical female cadet, the imagined typical male cadet was judged to possess more of the cluster of attributes associated with motivation, including dedication, physical fitness, and diligence. Imagined typical male cadets were also judged to possess more leader-like qualities, including leadership and self-confidence than were imagined typical female cadets. Furthermore, ideal and typical male cadets were judged to be more masculine and less feminine than ideal and typical female cadets. In summary, an imagined typical male cadet was judged to possess more leader-like, masculine qualities than an imagined typical female cadet. Given that the male leader may be judged as possessing more leadership characteristics than their female counterparts, male leaders might be afforded higher leadership ratings in comparison to female leaders.

Examining leadership ratings, Thomas (1987) conducted a content analysis on the narrative portion of 239 (119 men, 120 women) naval officer evaluations. In this analysis, male officer evaluations provided more information about their anticipated performance in combat and the impact of their efforts on the Navy than did the women's. Also, more male than female officers were described as being competent, effective in training others,

marked by Navy characteristics, and physically fit. In addition, more women than men were described as supporting equal opportunity programs, appearing impeccable in the uniforms (well groomed), and being an asset to the command. Finally, leadership skills were mentioned significantly more frequently in the men's narratives than in women's, while management/administrative skills were noted more frequently in the women's. Using these content differences, Thomas crafted two promotion recommendations, which contained either traditional male gender-role characteristics or traditional female gender-role characteristics. The sex of the officer was masked on each of these recommendations. The narratives were evaluated by 67 (61 men, 6 women) senior naval officers who were asked to recommend one of the two officers for promotion. A significant number (58 of 67) of senior officers selected the officer described with traditionally male gender-role characteristic over the officer described with traditionally female gender-role characteristics. This tendency to favor male gender-role characteristics in military leadership may extend to military leadership displayed in groups.

Rice, Bender, and Vitters (1980) studied leader sex, follower gender-role attitudes, and leadership effectiveness among 288 1<sup>st</sup> year USMA cadets. These cadets were assigned to 72 four-person groups led by either a male or female leader. The group members rated their leader using measures of group performance, as well as measures that rated the members' perceptions of their leader. Group members who held very traditional gender-role attitudes were more likely to devalue the role of their female leader in regards to group accomplishment. However, respondents with more liberal

views toward women's roles often favored female leaders with regard to these attributional judgments. In other words, the more non-traditional the gender-role attitude, the more likely a group member would attribute group success to a female leader. Inversely, the more traditional the gender-role attitude, the more the group member would devalue the contribution of the female leaders with respect to group accomplishment.

In an attempt to replicate these results, Adams, Rice, and Instone (1984) moved from the laboratory into the field. In a study at the USMA, 1,458 male and 161 female cadets participated in one of two six-week training programs under either a male or female platoon/squad leader. Prior to training, cadets completed a scale assessing their attitudes toward women in the military, and at posttraining, cadets completed a questionnaire describing their platoon or squad leader. The gender-role attitudes of women were significantly less traditional than those of men. However, non-traditional and traditional cadets did not make different attributional or evaluative judgments regarding the performance of male and female leaders.

In a more recent study, Robinson Kurpius, Lucart, and Looney (in press) examined leader sex, rater sex, rater gender-role attitudes, and leadership evaluations with USNA midshipmen. In this study, 102 midshipmen (67 men and 35 women) were randomly assigned by sex to evaluate a written vignette depicting either a male or female lieutenant up for promotion. The descriptions were identical except for the name of the lieutenant and corresponding personal pronouns. Midshipmen were asked to evaluate leadership and promotability, as well as to assess the lieutenants on 27 different

leadership characteristics. These characteristics were grouped into three clusters: emotional, positive, and negative leadership characteristics. Following this leadership evaluation, midshipmen were asked to complete measures that examined their views of gender roles in society for both men and women. Results indicated that overall, male leaders were not rated significantly different from female leaders. Although female evaluators provided higher leadership assessments in general, no rater sex differences were indicated.

When Robinson Kurpius et al. (in press) examined rater sex and gender-role attitudes, a number of patterns emerged. For the male lieutenant, beliefs that men need to be tough and gain respect (traditional gender-role attitudes) were positively related to perceptions of the male lieutenant not having emotional leadership characteristics. Likewise, beliefs that men need to be tough (traditional gender-role attitude) were positively related to the perceptions of the male lieutenant as having positive leadership characteristics. When the female lieutenant was evaluated, gender-role attitudes about women did not yield any significant findings, but attitudes about men in society did produce significant results. Beliefs that men need to be tough and should not engage in feminine activities (traditional gender-role attitudes) resulted in fewer perceptions that the female lieutenant had emotional leadership characteristics. Finally, lieutenant sex and leadership characteristics accounted for most of the variance in leadership evaluations. In summary, lieutenant sex and rater sex were not significant factors; however, traditional male gender-role attitudes did impact which characteristics were assigned to these

military leaders. Thus in this military setting, attitudes toward men's roles in society are a salient factor in the leadership evaluations of male and female leaders.

In addition to leader sex, rater sex, and rater gender-role attitudes, the military leader's behavior likely has an impact on leadership evaluations. One behavior that has previously been found to impact rater perceptions is leadership style.

#### *Military Leadership Evaluations and Leadership Style*

In spite of an exhaustive search of relevant literature, no studies were discovered that explored the impact of leadership style on sex-differentiated military leadership evaluations. Research in other settings, however, has found an interaction between leader sex and leadership style. As presented earlier, Eagly et al. (1992) introduced the concept of gender-role congruency, defined as the extent to which leaders behave in a manner that is congruent with gender-role expectations. To the extent that women lead in a feminine style, they may not be subjected to the negative evaluations that they would otherwise receive. In contrast, to the extent that women lead in a masculine style, they may exacerbate perceived role conflict and increase the likelihood of receiving unfairly negative evaluations of their performance. Male leaders do not face a basic role conflict parallel to the conflict that women face in their dual status as women and leaders. Therefore, as a consequence of the consensual belief that men have a right to lead, men may enjoy greater latitude to carry out leadership in a variety of masculine and feminine styles.

In order to determine if men and women adopt different leadership styles, Eagly and Johnson (1990) conducted a meta-analysis of 161 studies. Consistent with stereotypic

expectations, women tended to adopt a more democratic or participative style and less autocratic or directive style than did men. A second meta-analysis indicated only a small overall tendency for female leaders to be evaluated less favorably than male leaders (Eagly et al., 1992). This tendency, however, was more pronounced when women leaders behaved in a stereotypically masculine style (gender incongruent), particularly when this style was autocratic or directive. This suggests that rater perceptions may be influenced by leaders who employ a leadership style that is gender-role incongruent.

According to the previously reviewed literature, the role of leader or manager is predominately viewed as masculine (e.g., Powell & Butterfield, 1979, 1989; Powell et al., 2002). Likewise, the role of military leader is principally conceptualized as masculine (e.g., Boldry et al., 2001; Dunivin, 2000; O’Neil, 1981; Savell et al., 1979). With the military leadership role conceptualized as masculine, officers in these roles would likely need to display masculine behavior to be viewed as effective. But if women officers adopt a masculine leadership style, they face the potential of violating the gender-role congruency theory. Likewise, if women officers display a feminine style of leadership, thus maintaining gender-role congruency, they may be negatively evaluated due to the masculine expectations of the military leadership role. Women officers likely face a double-jeopardy situation that results in lower evaluations, regardless of adopting a feminine or masculine leadership style.

### Summary

Despite a recent increase in women holding managerial positions, women are still underrepresented at the highest levels in business and in the military. One potential

reason for this “glass ceiling” in management and leadership is bias in performance evaluations. The research findings examining sex differences in leadership evaluations are mixed. Some studies report no sex differences; other studies report findings favoring male leaders, while still other research findings appear to favor female leaders. In a meta-analysis examining gender and leadership evaluation, Eagly et al. (1992) found only a small overall tendency for participants to evaluate female leaders less favorably than male leaders. The devaluation of women was greater when the evaluators were men and when the leaders occupied male-dominated roles. The literature on the relationship between leadership evaluation and rater sex is mixed. Studies using nonmanagerial evaluators showed no sex differences. In studies using managerial raters, female raters showed either no sex differences or preferences for women leaders, but male raters uniformly preferred male leaders.

The research on gender-role attitudes suggests that both sexes view the managerial role as predominately a masculine role. Consequently, the more traditional a rater’s gender-role attitude, the more likely the rater would devalue a female leader as compared to a male leader. This relationship between gender-role attitude and leadership evaluation holds true for both sexes of raters. When considering leadership style and leadership evaluations, women tended to adopt a more feminine style of leadership (e.g., democratic) while men showed a preference of a masculine leadership style (e.g., autocratic). In general, when women adopted a masculine style of leadership (gender incongruent), they were devalued as leaders in comparison to men.

In the few studies concerning sex differences in military leadership evaluation, there is a consistent trend that devalues women leaders. The studies that addressed the relationship between rater sex and evaluation indicate that both male and female raters devalue female leaders in comparison to their male peers. As for gender-role attitudes in the military, male military cadets/midshipmen tend to hold more traditional gender-role attitudes than female military cadets/midshipmen or civilian students. Similar to the findings in civilian organizations, military members view the military leadership role as predominately a masculine role. Only a few studies examined the relationship between gender-role attitudes and military leadership evaluation. One laboratory study found that traditional gender-role attitudes were related to female leader devaluation, but the attempted field replication of these findings showed no sex differences in military leadership evaluation. As for leadership style, no studies have examined the impact of gender-role congruency and military leadership evaluations.

#### Purpose of This Study

The purpose of this study was to examine the relationships among rater sex, leader sex, rater gender-role attitudes, leadership style, and military leadership evaluations.

#### Hypotheses

This study investigated seven hypotheses.

H1: Female leaders will be rated significantly lower in military leadership evaluations than male leaders.

H2: Male and female officers will differentially evaluate male and female leaders.

H3: Female leaders whose leadership style is autocratic/masculine will be rated significantly lower in military leadership evaluations than all other types of leaders.

H4: For female officers, gender-role attitudes toward men and women will not be related; however, for male officers, traditional gender-role attitudes toward men will be positively related to traditional attitudes toward women.

H5: Officer sex, leadership style and gender-role attitudes will be significant predictors of leadership evaluations for male leaders.

H6: Officer sex, leadership style and gender-role attitudes will be significant predictors of leadership evaluations for female leaders.

H7: Male officers will report significantly more traditional gender-role attitudes than will female officers.

## CHAPTER 2

### METHOD

#### Participants and Recruitment

United States Air Force Field Grade Officers (Majors, Lieutenant Colonels, and Colonels) from Professional Military Education Schools and Luke Air Force Base were invited to participate. Return of a completed research packet indicated consent to participate (see Appendix A). Completed research packets were received from 108 men and 58 women representing many different career fields in the military. The sample had a mean age of 39.35 years ( $SD = 4.82$ ) and an ethnic distribution of 141 (84.9%) Euro-American, 9 (5.4%) African American, 6 (3.6%) Asian American/Pacific Islander, 2 (1.2%) Latino, 2 (1.2%) Native American, 1 (.6%) Multi-ethnic, and 3 (1.8%) reported “other.” As for marital status, 137 (82.5%) reported being married, 15 (9%) said they were divorced, while 14 (8.4%) noted they were single. The religious affiliation included 80 (48.2%) Protestants, 55 (33.1%) Catholics, 2 (1.2%) Latter-Day Saints, 13 (7.8%) “other,” and 13 (7.8%) reported no religious identification. Highest level of education completed included 8 (4.8%) reporting a bachelor degree, 15 (9%) indicating post bachelor’s coursework, 106 (63.9%) noting a master’s degree, 12 (7.2%) identifying post master’s coursework, 8 denoting a doctorate degree (4.8%), with 3 (2%) acknowledging post-doctorate coursework.

When asked about parents in the military, 100 (60.2%) replied positively (64 men and 36 women). Of the officers who responded positively, 88 (92.6%) noted their father served, 1 (1.1%) said his/her mother, while 6 (6.3%) indicated both parents served in the military. In the sample, 52 (31.5%) indicated they were married to a military member,

and 113 (68.5%) said they were not. With regards to past supervisors, 105 (63.3%) said they previously had a female supervisor, while 164 (98.8%) reported having had a male supervisor. Table 1 presents demographics for the male and female officers.

Table 1

*Demographics for Male and Female Officers*

| Variable                     | Male Officers |      | Female Officers |      | Total |      |
|------------------------------|---------------|------|-----------------|------|-------|------|
|                              | n             | %    | n               | %    | n     | %    |
| <b>Ethnicity</b>             |               |      |                 |      |       |      |
| Euro-American                | 93            | 70   | 48              | 30   | 141   | 84.9 |
| African-American             | 5             | 55.6 | 4               | 44.4 | 9     | 3.6  |
| Asian-American               | 3             | 50   | 3               | 50   | 6     | 5.8  |
| Chicano/Latino-American      | 1             | 50   | 1               | 50   | 2     | 1.2  |
| Native-American              | 2             | 100  | 0               | 0    | 2     | 1.2  |
| Multi-ethnic                 | 0             | 0    | 1               | 100  | 1     | .6   |
| Other                        | 2             | 66.6 | 1               | 33.4 | 3     | 1.8  |
| <b>Religious Affiliation</b> |               |      |                 |      |       |      |
| Protestant                   | 50            | 62.5 | 20              | 37.5 | 80    | 48.2 |
| Catholic                     | 35            | 63.6 | 30              | 36.4 | 55    | 33.1 |
| Latter Day Saints            | 2             | 100  | 0               | 0    | 2     | 1.2  |
| Other Religious Affiliation  | 10            | 76.9 | 3               | 23.1 | 13    | 7.8  |
| No Religious Affiliation     | 9             | 69.2 | 4               | 30.8 | 13    | 7.8  |

Table 1, continued

|                            |  | Male Officers | Female Officers | Total |          |          |
|----------------------------|--|---------------|-----------------|-------|----------|----------|
|                            |  | Variable      |                 |       |          |          |
|                            |  | <i>n</i>      |                 |       | <i>n</i> |          |
|                            |  |               |                 |       | <i>%</i> |          |
|                            |  |               |                 |       |          | <i>%</i> |
|                            |  |               |                 |       | <i>n</i> |          |
|                            |  |               |                 |       | <i>%</i> |          |
| Marital Status             |  |               |                 |       |          |          |
| Married                    |  | 98            | 71.5            | 39    | 28.5     | 137      |
| Divorced                   |  | 6             | 46.2            | 9     | 53.8     | 15       |
| Single                     |  | 4             | 28.6            | 10    | 71.4     | 14       |
| Highest Level of Education |  |               |                 |       |          |          |
| Bachelor's Degree          |  | 5             | 62.5            | 3     | 37.5     | 8        |
| Post Bachelor's            |  | 11            | 73.3            | 4     | 26.7     | 15       |
| Coursework                 |  |               |                 |       |          |          |
| Master's Degree            |  | 74            | 69.8            | 32    | 30.2     | 106      |
| Post Master's Coursework   |  | 6             | 50              | 6     | 50       | 12       |
| Doctoral Degree            |  | 3             | 37.5            | 5     | 62.5     | 8        |

|                                |    |      |    |      |     |      |
|--------------------------------|----|------|----|------|-----|------|
| Post Doctoral Coursework       | 2  | 66.7 | 1  | 33.3 | 3   | 2    |
| <b>Parents in the Military</b> |    |      |    |      |     |      |
| Father                         | 57 | 64.8 | 31 | 35.2 | 88  | 53.0 |
| Mother                         | 1  | 100  | 0  | 0    | 1   | 1.7  |
| Both                           | 2  | 33.3 | 4  | 66.7 | 6   | 3.6  |
| None                           |    |      |    |      | 66  | 39.7 |
| <b>Married to Military</b>     |    |      |    |      |     |      |
| No                             | 89 | 78.8 | 24 | 21.2 | 113 | 68.5 |
| Yes                            | 19 | 36.5 | 33 | 63.5 | 52  | 31.5 |

Table 1, continued

|                        |  | Male Officers | Female Officers | Total |      |      |
|------------------------|--|---------------|-----------------|-------|------|------|
|                        |  | Variable      |                 |       |      |      |
|                        |  | <i>n</i>      |                 |       |      |      |
|                        |  | <i>%</i>      |                 |       |      |      |
|                        |  | <i>n</i>      |                 |       |      |      |
|                        |  | <i>%</i>      |                 |       |      |      |
|                        |  | <i>n</i>      |                 |       |      |      |
|                        |  | <i>%</i>      |                 |       |      |      |
| <b>Male Supervisor</b> |  |               |                 |       |      |      |
| Yes                    |  | 107           | 65.2            | 57    | 34.8 | 164  |
|                        |  |               |                 |       |      | 98.8 |

|                          |    |      |    |      |     |      |
|--------------------------|----|------|----|------|-----|------|
|                          |    |      |    |      |     | 50   |
| No                       | 1  | 50   | 1  | 50   | 2   | 1.2  |
| <b>Female Supervisor</b> |    |      |    |      |     |      |
| Yes                      | 62 | 59   | 43 | 41   | 105 | 63.3 |
| No                       | 46 | 75.4 | 15 | 24.6 | 61  | 36.7 |

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### Design

This study utilized a 2 X 2 X 2 experimental design. Participants were blocked by sex, a fixed factor, and then randomly assigned to either male or female leader and to one of the two leadership styles (autocratic/masculine or democratic/feminine).

### Intervention

Sex of leader was crossed with leadership style to create four forms of the intervention scenario. Participants received a Promotion Recommendation Form (PRF) of a male or female Air Force Captain (sex of leader) up for promotion to Major. This standard form included brief biographical information, current unit and job descriptions, and a written summary of the leader's past accomplishments. Along with a copy of the officer's annual performance reports, this form is used by a board of senior officers to promote junior officers to their next higher rank in the Air Force. The written instructions for this study read, "You have been assigned as an evaluator on the Promotion Selection Board. Your job is to carefully assess the qualities, performance, and promotability of the officer described in the PRF. When you have finished reading the PRF, please answer the attached statements and complete the ratings." The four PRFs are in Appendix B.

Participants were randomly assigned by sex to one of four interventions varying the sex of the leader, male or female, and the leadership style portrayed, autocratic (masculine) or democratic (feminine). Therefore, the participants rated one of four PRFs: 1) male leader using a masculine leadership style; 2) male leader using a feminine leadership style; 3) female leader using a masculine leadership style; or 4) female leader using a feminine leadership style. Both the PRFs portraying a masculine leadership style were identical, except for the name of the officer (John versus Jennifer Reynolds) and the accompanying personal pronouns. These similarities and differences held true for the two PRFs portraying a feminine leadership style.

The PRFs displaying different leadership styles were identical in their performance outcomes, with only the terms used to describe the leadership style varying. As noted previously, this study examined two leadership styles: democratic/masculine (allowing subordinates to participate in decision making) or autocratic/feminine (discouraging subordinates from participating in decision making). In the autocratic (masculine) leadership style, terms used to describe the leadership style included “directive section chief,” “independent leader,” “self-reliant research,” “relies on own expertise,” “commanding section chief,” “unilaterally sets group objectives,” and “self-sufficient problem solving.” In contrast, terms describing the democratic (feminine) leadership style included “collaborative section chief,” “participative leader,” “consensus-building research,” “relies on team expertise,” “team-oriented section chief,” “negotiates group objectives,” and “group problem solving.”

The following is the narrative portion of the male leader, masculine/autocratic leadership style PRF (note, these statements appeared in bullet format on the form):

- Capable officer--knowledgeable missileer, adept staff officer and directive section chief; well-rounded
- Proficient operator! He completed over 250 Missile Alerts with zero deficiencies--sustained performer
  - Independent leader's decisions needed no team input; his leadership led to unit's outstanding IG rating
- Fine staffer! Self-reliant research, writing, and briefing skills key to completion of many OIs
  - Relies on own expertise--authored MOA defining exercise relationship to NORAD/USSPACECOM
- Commanding section chief--he unilaterally sets group objectives and clear timelines; productive section
  - Directed his team to create 7 new training exercises--contributed to high unit mission-ready status
  - Self-sufficient problem solving during exercise--his team's performance led to Outstanding Unit Award
- Competent officer and leader--challenge John with increased responsibility; promote and send to ISS!

In contrast, the following is the narrative portion of the male leader, feminine/democratic leadership style PRF (note, these statements appeared in bullet format on the form):

- Capable officer--knowledgeable missileer, adept staff officer and collaborative section chief; well-rounded
- Proficient operator! He completed over 250 Missile Alerts with zero deficiencies--sustained performer
  - Participative leader who seeks team input for decisions; his leadership led to unit's outstanding IG rating
- Fine staffer! Consensus-building research, writing, and briefing skills key to completion of many OIs
  - Relies on team expertise--authored MOA defining exercise relationship to NORAD/USSPACECOM
- Team-oriented section chief--he negotiates group objectives and clear timelines; productive section
  - Worked with his team to create 7 new training exercises--contributed to high unit mission-ready status
  - Led group problem solving during exercise--his team's performance led to Outstanding Unit Award
- Competent officer and leader--challenge John with increased responsibility; promote and send to ISS!

#### Instrumentation

Participants completed the Attitudes Toward Women Scale (AWS; Spence & Helmreich, 1972), the Male Role Norms Scale (MRNS; Thompson & Pleck, 1986), and a measure of leadership evaluation appropriate for the military and designed for this study.

The demographic sheet, the Leadership Evaluation, and the study intervention were completed first, while the AWS and the MRNS were completed after the intervention was completed. The demographic sheet asked about sex, age, rank, ethnicity, religion, and time in service (see Appendix C for the demographic sheet).

#### *Attitudes Toward Women Scale (AWS)*

The AWS is the most widely used measure of attitudes toward women, reported in more than 300 published studies between 1978 and 1990 (Beere, 1990). The AWS (Spence & Helmreich, 1972) measures attitudes concerning the rights, roles, obligations, and privileges that women should have in modern society. The original AWS (Spence & Helmreich, 1972) contained 55 items, but brief 25-item (Spence, Helmreich, & Strapp, 1973) and 15-item (Spence & Helmreich, 1978) versions were subsequently developed. Spence et al. (1973) recommended use of the AWS short-form when the purpose is to compare groups and when the desired responses range from traditional to liberal. As noted by Eagly and Mladinic (1989), the AWS is not, despite its title, a general measure of beliefs about women. Rather the AWS was designed to measure attitudes toward women's roles, rights, and responsibilities. In this study, the AWS will be referred to as a measure of attitudes about women's gender roles.

The 25-item, and subsequently the 15-item short version, was originally developed from an item analysis of the 55-item version using the responses of 241 female and 286 male undergraduates (Spence et al., 1973). The student sample from introductory psychology classes was tested during the 1971-72 school year. The item analysis provided for the selection of items that had maximum discrimination among quartile

groups for both sexes and the largest biserial correlations. A 4-point response scale accompanies each item of the AWS short-form: (a) agrees strongly, (b) agrees mildly, (c) disagrees mildly, or (d) disagrees strongly, with item scores ranging from 0 to 3. Lower scores reflect more traditional attitudes, while higher scores reflect more nontraditional or liberal attitudes (Spence & Hahn, 1997).

Spence and Helmreich (1978) reported a Cronbach alpha of .89 on the 15-item AWS, with a correlation of .91 between the 15-item and 55-item versions with college students. For the 25-item version, Spence et al. (1973) reported a Cronbach alpha of .89 and a correlation of .96 with the 55-item version. Summarizing studies using 15-item and 25-item short versions, Spence and Hahn (1997) reported Cronbach alphas in the mid-.80s or higher, a satisfactory test-retest reliability, and a high correlation with the original 55-item scale.

The 25 item short-form was used as a sex role measure for the U.S. Military Academy's male and female first-year cadets (Yoder, Rice, Adams, Priest, & Prince, 1982) during the summer and fall of 1978. This instrument was selected in association with Project Athena, a study to assess the initial entry of women at the academy in 1978. The AWS was administered before and after Basic Cadet Training, a six-week program of intense physical testing and training. Reliability data for males ( $n = 1,007$ ) revealed test-retest reliability was .74 and the before and after alpha coefficients were .83 and .85, respectively. For females ( $n = 78$ ) test-retest reliability was .80 and alpha-coefficients were .81 and .82.

Robinson Kurpius and Lucart (2000) used the 25-item AWS with USNA midshipmen and reported a mean total score of 49.50 ( $SD = 10.45$ ). In her study with Air Force cadets, Cecil (1996) reported an alpha of .86 for the AWS. For her senior cadets, the mean total score was 56.00. In a more recent study with USNA midshipmen, Robinson Kurpius, Looney & Lucart (in press) reported a Cronbach alpha of .74 and a mean total score of 50.47 ( $SD = 7.25$ ). The current study used the 25 item AWS short-form. Responses across the 25 items were averaged so that scores ranged from zero to three. Higher score reflect more non-traditional or liberal attitudes. In this study, the Cronbach alpha for the entire sample was .79 with a mean total score of 56.66 ( $SD = 7.98$ ). The Cronbach alpha for male and female officers was .78 ( $M = 54.63$ ,  $SD = 7.80$ ) and .72 ( $M = 60.48$ ,  $SD = 6.89$ ), respectively.

#### *Male Role Norms Scale*

The Male Role Norms Scale (MRNS; Thompson & Pleck, 1986) is based on the masculinity ideology identified by Brannon (1976; Brannon & Juni, 1984). The 26-item MRNS was derived empirically by factor analyzing the 58-item Brannon Masculinity Scale (BMS). This analysis reduced the number of subscales from four to three. The resulting three dimensions included: status norms representing the need for men to achieve status and respect (11 items), toughness norms reflecting the expectation for men to be tough and self-reliant (8 items), and antifemininity norms corresponding to the belief that men should avoid women's traditional activities (7 items).

Similar to the BMS, the MRNS measures ideology only and does not include items that measure gender attitudes in general or gender attitudes toward women

(Thompson, Pleck, & Ferrera, 1992). Masculinity ideology is based on a social constructionist model verses a trait (i.e., psychologically or biologically based) model and consists of “a range of normative standards defining the traditional male sex role” (Thompson & Pleck, 1986, p. 532).

As noted previously, the MRNS consists of three subscales: status, toughness, and antifemininity. An item representing the status subscale reads, “Success in his work has to be man’s central goal in this life.” An example of a toughness subscale item reads, “When a man is feeling a little pain he should try not to let it show very much.” Finally, an item illustrating the antifemininity subscale reads, “It bothers me when a man does something that I consider ‘feminine.’” The 26-item self-report MRNS scale uses a 7-point “very strongly disagree” to “very strongly agree” response format (Thompson & Pleck, 1986). Each item is scored from 1 to 7, and low scores reflect a nontraditional attitude, while high scores indicate a more traditional attitude.

Combining multiple samples of male and female college students ( $N = 1,510$ ), Thompson (1990) reported the total scale’s internal reliability as .86, and alpha coefficients of .81, .74, and .76 for status, toughness, and antifemininity, respectively. The MRNS was positively related ( $r = .44$  for undergraduate males;  $r = .55$  for undergraduate females) to the 15-item short-form of the AWS, which Thompson noted indirectly assesses attitudes toward men and toward gender relations.

Using the MRNS with a sample of USNA midshipmen, Robinson Kurpius and Lucart (2000) reported means of 44.55 ( $SD = 9.08$ ) for status, 35.30 ( $SD = 8.04$ ) for toughness, and 25.68 ( $SD = 7.83$ ) for antifemininity. Robinson Kurpius et al. (in press)

reported alpha coefficients for the sub-scales for status, toughness, and antifemininity as .75, .74, and .78, respectively. The reported means were 46.56 ( $SD = 8.08$ ) for status, 28.74 ( $SD = 6.48$ ) for toughness, and 30.90 ( $SD = 6.66$ ) for antifemininity. Thompson and Pleck (1995) reviewed available instruments assessing masculinity ideology versus measures of gender stereotypes or gender orientation. They identified construct validity, brevity of form, and discriminant validity as strong points of the MRNS.

For this study, the three subscales of the MRNS measured gender-role attitudes toward men. An average score within each subscale was calculated. Score range was one to seven, with higher scores reflecting more traditional attitudes about men's gender roles. For the entire sample, the alpha coefficients for the sub-scales for status, toughness, and antifemininity were .77, .72, and .85, respectively. The reported means were 37.67 ( $SD = 7.68$ ) for status, 30.57 ( $SD = 6.12$ ) for toughness, and 22.30 ( $SD = 6.78$ ) for antifemininity. For male officers, the alpha coefficients were .79 ( $M = 38.31$ ,  $SD = 7.88$ ) for the status scale, .62 ( $M = 32.45$ ,  $SD = 5.28$ ) for the toughness scale, and .83 ( $M = 24.32$ ,  $SD = 6.49$ ) for the antifemininity scale. For female officers, the alpha coefficients for the sub-scales for status, toughness, and antifemininity were .76 ( $M = 36.47$ ,  $SD = 7.21$ ), .74 ( $M = 27.10$ ,  $SD = 6.09$ ), and .80 ( $M = 18.59$ ,  $SD = 5.69$ ), respectively.

#### *Leadership Evaluation Measure*

The leadership evaluation measure was developed specifically for this study. The measure consists of 19 items derived from the Air Force Field Grade Officer Performance Report Form (AF Form 707A). The official Air Force form is used to assess field grade officer performance annually on six different performance factors: job

knowledge; leadership skills; professional qualities; communications skills; judgment/decision making skills; and organizational skills. On this form, each of the performance factors included a summary of a few behaviors that illustrated expected standards. Raters were then required to evaluate the officer on each of the six performance factors using a two-point scale: "Meets Standards" or "Does Not Meet Standards."

The descriptions for job knowledge included statements such as: "Has knowledge required to perform duties effectively. Strives to improve knowledge. Applies knowledge to handle nonroutine situations." Leadership skills were described as: "Sets and enforces standards. Motivates subordinates. Works well with others. Fosters teamwork. Displays initiative. Self-confident. Has respect and confidence of subordinates. Fair and consistent in evaluation of subordinates." For the third performance factor, professional qualities, statements read: "Exhibits loyalty, discipline, dedication, integrity, honesty, and officership. Adheres to Air Force standards. Accepts personal responsibility. Is fair and objective." Typical statements related to organizational skills included: "Plans, coordinates, schedules, and uses resources effectively. Anticipates and solves problems. Meets suspenses." Judgment/decision making skills were reflected by statements such as: "Makes timely and accurate decisions. Emphasizes logic in decision making. Retains composure in stressful situations. Recognizes opportunities and acts to take advantage of them." Finally, communication skills were illustrated by the following statement: "Listens, speaks, and writes effectively."

For the purposes of this study, the experimenter (an Air Force officer) developed the leadership evaluation measure, which was reviewed by two other officers for accuracy. Of the 19 items created, 18 were developed from the summary of expected behaviors for the six performance factors. Since the expected behaviors reflect field grade officers, the rank to which the captains may be promoted, the measure evaluated the leader's performance at a standard commensurate with that higher rank. Each item was rated on a 7-point scale from "very strongly disagree" to "very strongly agree" as to whether the leader being evaluated exceeded the particular behavioral standard. Appendix D presents the Leadership Evaluation Items. The final item, "The Captain should definitely be promoted to the rank of Major," was rated on the same 7-point scale. The Cronbach alpha for the entire sample was .89 and a mean of 82.92 ( $SD = 12.32$ ). Male officer responses produced an alpha coefficient of .90 and a mean of 83.02 ( $SD = 12.35$ ), while female officers reported an alpha coefficient of .89 and a mean of 82.76 ( $SD = 12.36$ ).

### Procedures

The participants were given a packet containing two envelopes. The first contained the consent form, PRF, and Leadership Evaluation Form. After completing the consent form, participants were instructed to review their assigned PRFs and fill out the Leadership Evaluation Measure independently. Upon completion of this measure, participants placed the PRF and Leadership Evaluation Form inside the packet. Next, participants opened the second envelope containing the demographic sheet (including a consent form), AWS, and MRNS. When these measure were completed, they were placed

in the same packet as the PRF and Leadership Evaluation Form and the completed packet were given to the experimenter. This order of presentation should have helped to conceal the true nature of the experiment and mitigate experimenter demand bias. Following the completion of all measures, participants were debriefed.

### Data Analyses

The design chosen to test the first two hypotheses was a 2 x 2 (Officer Sex by Leader Sex) ANOVA with leadership ratings as the dependent variable. A 2 x 2 (leader sex by leadership style) ANOVA was chosen to test the third hypothesis. To analyze the fourth hypothesis, correlations were conducted using the male and female gender-role attitude measures. For hypotheses five and six, hierarchical regression analyses were conducted using the variables of officer sex, leader sex, gender-role attitudes, and leadership style. For the final analysis, a MANOVA was conducted to determine the effect of officer gender on the four gender-role attitudes measures.

## CHAPTER 3

### RESULTS

#### Preliminary Analyses

Prior to testing the research hypotheses, potential officer sex differences due to marital status, ethnicity, religion, education level, parental military status, marital military situation, and military supervisor background were examined. For each set of analyses, the alpha was set at .05 for rejection of no differences. The only significant difference found between male and female officers concerned age. An independent-samples  $t$  test,  $t$  (102.25) = -.318,  $p$  = .039, revealed that the female officers were significantly older ( $M$  = 41.00,  $SD$  = 5.15) than the male officers ( $M$  = 38.46,  $SD$  = 4.41). To follow up on this significant difference, a 2 X 2 X 2 (Officer Sex by Leader Sex by Leadership Style) ANOVA was conducted to examine potential interactions between officer sex and leader variables based on officer age. No significant interactions were found; therefore, age was not considered a contaminating variable with respect to the intervention.

### Hypotheses Testing

The first hypothesis predicted that female leaders would be rated significantly lower in military leadership evaluations than would male leaders. The second hypothesis stated that male and female officers would differentially evaluate male and female leaders. A 2 x 2 (Officer Sex by Leader Sex) ANOVA was conducted to test these two hypotheses with leadership ratings as the dependent variable. There was no significant main effect for leader sex,  $F$  (1, 162) = .82,  $p$  = .53, or for officer sex,  $F$  (1, 162) = .04,  $p$  = .88, and no significant interaction,  $F$  (1, 162) = .63,  $p$  = .43. Neither the sex of the leader nor the sex of the officer significantly influenced leadership ratings. This analysis

does not support hypothesis one or hypothesis two. The descriptive data for officer sex by leader sex are presented in Table 2.

Table 2

*Leadership Evaluation Scores of Officers Rating Male Leaders*

|                | Male Officers |           | Female Officers |           |
|----------------|---------------|-----------|-----------------|-----------|
|                | <i>M</i>      | <i>SD</i> | <i>M</i>        | <i>SD</i> |
| Male Leaders   | 4.37          | .72       | 4.43            | .61       |
| Female Leaders | 4.37          | .59       | 4.27            | .69       |

The third hypothesis predicted that female leaders displaying an autocratic leadership style would be rated significantly lower in military leadership evaluations than all other types of leaders. In order to test this hypothesis, a 2 by 2 (leader sex by leadership style) ANOVA was conducted with leadership evaluation scores as the dependent variable. There were no significant main effects for either leader sex,  $F(1, 162) = .24, p = .711$ , or leadership style,  $F(1, 162) = 2.14, p = .364$ , and no significant interaction,  $F(1, 162) = 1.15, p = .285$ . In other words, there were no significant differences between the evaluations given to gender incongruent female leaders and other types of leaders (see descriptive statistics in Table 3). These findings do not support hypothesis three.

The fourth hypothesis concerned gender-role attitudes. For female officers, it was predicted that gender-role attitudes toward men and toward women would not be significantly related; while, for male officers, traditional gender-role attitudes toward men would be positively related to traditional attitudes toward women. To test this hypothesis,

correlations were conducted using the Attitudes Toward Women Scale and each of the three Male Role Norms subscales, namely toughness, antifemininity, and status.

Table 3

*Leadership Evaluation Scores of Officers Across Leadership Styles*

|                | Autocratic |           | Democratic |           |
|----------------|------------|-----------|------------|-----------|
|                | <i>M</i>   | <i>SD</i> | <i>M</i>   | <i>SD</i> |
| Male Leaders   | 4.25       | .68       | 4.53       | .65       |
| Female Leaders | 4.31       | .61       | 4.37       | .64       |

For female officers, the analyses yielded no significant correlations between male and female gender-role attitudes. For male officers, however, the belief that men need to be tough was negatively related to nontraditional views of women's role in society ( $r = -.23, p < .05$ ). Also, beliefs that men should not engage in stereotypically feminine activities were negatively related to nontraditional perceptions of women ( $r = -.41, p < .01$ ). In other words, for men, traditional views of women in society were significantly related to traditional views of men in society, especially concerning toughness and antifemininity (see Table 4 and 5). This analysis supports hypothesis four.

The fifth hypothesis predicted that officer sex, leadership style, and gender-role attitudes would significantly predict leadership evaluations for male leaders. Correlation coefficients were computed among these variables (see Table 6) and only leadership style was significantly correlated ( $r = -.21, p = .033$ ) with leadership evaluations. This finding indicates a tendency for democratic male leaders to be rated higher in leadership evaluations in comparison to autocratic male leaders.

Table 4

*Intercorrelations Among Gender-role Attitude Measures for Male Officers*

|                               | Men Need<br>Status | Men Need<br>Toughness | Men do not<br>Need Femininity | Attitudes<br>Toward Women |
|-------------------------------|--------------------|-----------------------|-------------------------------|---------------------------|
| Men Need<br>Status            | 1.00               | .36*                  | .23**                         | -.10                      |
| Men Need<br>Toughness         |                    | 1.00                  | .39*                          | -.23**                    |
| Men do not<br>Need Femininity |                    |                       | 1.00                          | -.41*                     |
| Attitudes<br>Toward Women     |                    |                       |                               | 1.00                      |

\*  $p < .05$ , 2-tailed. \*\*  $p < .01$ , 2-tailed.

Table 5

*Intercorrelations Among Gender-role Attitude Measures for Female Officers*

|                               | Men Need<br>Status | Men Need<br>Toughness | Men do not<br>Need Femininity | Attitudes<br>Toward Women |
|-------------------------------|--------------------|-----------------------|-------------------------------|---------------------------|
| Men Need<br>Status            | 1.00               | .26                   | .39*                          | -.10                      |
| Men Need<br>Toughness         |                    | 1.00                  | .46*                          | -.18                      |
| Men do not<br>Need Femininity |                    |                       | 1.00                          | -.08                      |
| Attitudes<br>Toward Women     |                    |                       |                               | 1.00                      |

\*  $p < .01$ , 2-tailed.

Officer sex, leadership style, and all gender-role attitudes measures were entered into the hierarchical regression equation to predict leadership evaluations for male leaders. These variables failed to account for a significant portion,  $F(6, 81) = 1.08, p = .38$ , of the variance ( $R^2 = .08$ ) in leadership evaluations. Based on the correlations among the gender-role attitude measures (see Table 6), the next hierarchical regression included all the gender-role attitude measures. This regression equation, as well as equations examining both officer sex and leadership style individually, also failed to account for a significant portion of the variance in leadership evaluations provided to male leaders.

Table 6

*Intercorrelations Among Gender-role Attitude Measures, Leadership Style and Leadership Evaluations for Male Leaders*

|                            | Leadership Evaluation | Men Need Status | Men Need Toughness | Men do not Need Femininity | Attitudes Toward Women | Leadership Style |
|----------------------------|-----------------------|-----------------|--------------------|----------------------------|------------------------|------------------|
| Leadership Evaluation      | 1.00                  | .01             | -.08               | .07                        | .07                    | -.21*            |
| Men Need Status            |                       | 1.00            | .34**              | .20*                       | .02                    | -.12             |
| Men Need Toughness         |                       |                 | 1.00               | .58**                      | -.38**                 | -.01             |
| Men do not Need Femininity |                       |                 |                    | 1.00                       | -.42**                 | -.01             |
| Attitudes Toward Women     |                       |                 |                    |                            | 1.00                   | .06              |
| Leadership Style           |                       |                 |                    |                            |                        | 1.00             |

\*  $p < .05$ , 1-tailed. \*\*  $p < .01$ , 1-tailed.

Hypothesis six predicted that officer sex, leadership style, and gender-role attitudes would significantly predict leadership evaluations for female leaders. When leadership style, officer sex and gender-role attitudes were entered into the regression equation, they failed to account for a significant amount of the variability (13.6%) in leadership scores for women,  $F (6, 81) = 1.96, p = .082$ . Likewise, when officer sex or leadership style alone was entered into the regression equation, they failed to predict leadership scores for women. Based on the correlations among the gender-role attitude measures, the next hierarchical regression included all the gender-role attitude measures entered as a cluster to predict female leadership scores. This equation accounted for a significant portion (11.3%) of the variance of leadership evaluations,  $F (4, 81) = 2.46, p = .05$ .

When both gender-role attitudes and officer sex were used to predict female leadership evaluations, they accounted for 13.4% of the variance,  $F (5, 81) = 2.34, p = .049$ . The addition of officer sex enhanced the predictive ability of gender-role attitudes ( $R^2$  change of 2.1%) to predict leadership evaluations for female leaders. The beta weight for the gender-attitudes concerning men needing status was significant. In summary, for female leaders, the most powerful regression equation included both gender-role attitudes and leader sex.

When correlations among the variables were explored, the belief that men need status was significantly related to female leadership evaluations,  $r (82) = .22, p = .024, B = .32, t (82) = .2.67, p = .009$ . In addition, the belief that men need to be tough,  $r (82) = .03$ , and non-traditional views of women's role in society,  $r (82) = .15$ , were positively related to leadership scores for women. Also, the belief that men need to not display

feminine qualities,  $r (82) = -.08$ , was negatively related to women's leadership ratings. In summary, the more officers held traditional views about men needing status/toughness, while holding non-traditional views of men needing to avoid feminine qualities and non-traditional views of women in society, the higher the ratings provided to female leaders.

To better understand the contribution of officer sex on the prediction of leadership evaluations for female leaders, two additional regressions were conducted. When the gender-role attitude measures for male officers were entered into the regression equation, they failed to predict a significant portion of the variability (13.3%) in leadership evaluations for female leaders,  $F (4, 50) = 1.93, p = .121$ . When the four gender-role attitude measures for female officers were entered into the regression equation, they accounted for a significant portion (33.2%) of the variance in leadership ratings given to female leaders,  $F (4, 22) = 2.74, p = .05$ . The beta weights for the gender-attitudes concerning men needing status ( $B = .54, t (26) = 2.69, p = .013$ ) and men not engaging in feminine activities ( $B = -.51, t (26) = -2.36, p = .028$ ) were significant (see Table 7 for a summary of regression analyses). When correlations among the variables were explored, the belief that men need status,  $r (27) = .26$ , and nontraditional views of women's roles in society,  $r (27) = .16$ , were positively related to female leadership evaluations. In addition, the belief that men need to be tough,  $r (27) = -.18$ , and the belief that men need to not display feminine qualities,  $r (27) = -.28$ , were negatively related to women's leadership ratings. In other words, the more female officers held non-traditional views of men and women in society, except for the belief that men need status, the higher the ratings provided to female leaders.

Table 7

*Summary of Regression Analyses for Variables Predicting Leadership Evaluations for Female Leaders*

| Predictor                  | B    | SE B | $\beta$ |
|----------------------------|------|------|---------|
| All Officers               |      |      |         |
| Attitudes Toward Women     | .45  | .25  | .21     |
| Men Need Status            | .30  | .11  | .32*    |
| Men Need Toughness         | .03  | .09  | .04     |
| Men do not Need Femininity | -.08 | .08  | -.13    |
| Female Officers            |      |      |         |
| Attitudes Toward Women     | .56  | .49  | .20     |
| Men Need Status            | .51  | .19  | .54*    |
| Men Need Toughness         | -.07 | .16  | -.09    |
| Men do not Need Femininity | -.41 | .17  | -.51*   |

*Note:*  $R^2 = .11$  for All Officers;  $\Delta R^2 = .22$  for Female Officers ( $p < .05$ ).

\*  $p < .05$ .

Examining gender-role attitudes, hypothesis seven predicted that male officers would report significantly more traditional gender-role attitudes than would female officers. To test this hypothesis, a MANOVA was conducted to determine the effect of officer sex on the four gender-role attitudes measures. Significant differences between men and women were found on the dependent measures, Wilks'  $\Lambda = .746$ ,  $F(4, 159) = 13.52$ ,  $p < .001$ . ANOVAs on each dependent variable were conducted as follow-up tests to the MANOVA.

Using the Bonferroni method, each ANOVA was tested at the .012 level. The analysis concerning the gender-role attitude of men needing status was not significant, but all other analyses were significant. Men and women differed significantly on their attitudes about men needing to be tough,  $F(1, 162) = 33.74, p < .001$ , their attitudes about men needing to avoid feminine activities,  $F(1, 162) = 31.78, p < .001$ , and their gender-role attitudes toward women,  $F(1, 162) = 22.65, p < .001$ . Men reported significantly more traditional attitudes concerning men needing to be tough (men:  $M = 4.06, SD = .66$ ; women:  $M = 3.39, SD = .77$ ), men needing to avoid feminine activities (men:  $M = 3.74, SD = .93$ , women:  $M = 2.65, SD = .82$ ) and attitudes toward women (men:  $M = 2.19, SD = .31$ , women:  $M = 2.42, SD = .28$ ). To summarize, men reported more traditional gender-role attitudes than did women, especially concerning men needing to be tough, men not engaging in feminine activities, and attitudes toward women.

## CHAPTER 4

### DISCUSSION

A number of interesting patterns emerged in this study. For male officers, traditional views of women in society were significantly related to traditional views of men in society, especially concerning toughness and antifemininity. It is not surprising that traditional attitudes toward women's roles are related to traditional attitudes toward men's roles for male military officers. In a study comparing the gender-role attitudes of male military cadets and their civilian peers, DeFlleur et al. (1978) found that male cadets had significantly more traditional attitudes about women's roles than did male undergraduates at a civilian institution. In a more recent study, Robinson Kurpius and Lucart (2000) found that military-affiliated men held more traditional attitudes about men needing to be tough than did civilian men. Likewise, USNA male midshipmen, as compared to civilian men, were also found to be more traditional in their attitudes toward women and their attitudes about men needing to avoid feminine activities. Part of reason why military men hold more traditional attitudes toward the roles of men and women in society may be accounted for by the military culture.

The military culture seems to promote traditional gender-role attitudes. As noted previously, Dunivin (2000) introduced the "Combat, Masculine-Warrior" paradigm to illustrate the links between military service and traditional gender-role attitudes. At the center of this model is the masculine-warrior image that pictures soldering as a traditionally masculine role with accompanying masculine norms, values, and lifestyles. Additional components of this model support conservatism, homogeneity of

predominately male force, and exclusion of women from combat roles. This traditional view of the military extends into the perceived appropriateness of certain military positions for women. Consequently, men with traditional views of men and women's role in society may be attracted to the military culture. In turn, the military culture may continue to reinforce traditional gender-role attitudes for male military members.

While male military officers tend to have traditional attitudes about the role of men and women in society, female military officers may not be as traditional as their male counterparts. In the current study, male officers reported more traditional gender-role attitudes than female officers concerning men needing status, men not engaging in feminine activities, and attitudes toward women. Again, it is not surprising that male military officers were more traditional than their female military peers. Many studies confirm this difference in gender-role attitudes between male and female military members. In a study comparing the gender-role attitudes of the first sex-integrated class at USMA, Priest et al. (1978) found that female cadets held less traditional views than male cadets concerning sex roles, marriage, and childrearing. In a later study at USMA, Adams (1984) also found that male cadets held significantly more traditional gender-role attitudes than did female cadets.

In a similar study at USAFA, DeFlueur et al. (1978) found that male military cadets held more traditional attitudes than did their civilian peers, while female military cadet attitudes did not significantly differ from their civilian peers. In a follow-up study, DeFlueur and Gillman (1978) again confirmed their previous findings that female cadets had significantly more non-traditional attitudes about women than did male cadets. In a

more recent study, Robinson Kurpius and Lucart (2000) confirmed that USNA men had the most traditional attitudes toward women as compared to the USNA females and civilian women. The military culture and the decision to join that culture likely account for a portion of the differences between male and female officer gender-role attitudes.

As noted previously, the military culture seems to promote traditional gender-role attitudes. The “Combat, Masculine-Warrior” paradigm, introduced by Dunivin (2000), conceptualizes the military officer as a masculine role with accompanying masculine norms, values, and lifestyles. This traditional view of the military extends into the perceived appropriateness of certain military positions for women. This paradigm seems to reflect very traditional gender-role attitudes, which would likely be attractive to men holding traditional attitudes about the role of men and women in society. In contrast, women who might seek a military career, a role that runs counter to traditional gender-role attitudes about the role of women in society, would likely hold nontraditional gender-role attitudes toward women. Women with traditional gender-role attitudes toward women would likely not seek out a military career because this would violate their views of women’s role in society. In summary, the military culture likely attracts men with traditional gender-role attitudes toward women, while it simultaneously attracts women with nontraditional gender-role attitudes toward women. Despite the differing gender-role attitudes of male and female military officers, these officers seem to favor men who display a nontraditional leadership style.

This study indicated a tendency for democratic male leaders to be rated higher in leadership evaluations in comparison to autocratic male leaders. On the surface, this

finding might seem contradictory to previous findings concerning gender-role attitudes. Given that male military officers tend to be more traditional in their gender-role attitudes, they would likely prefer a male leader who displays a traditionally male leadership style. In order to describe this preference for matching between leader sex and leader style, Eagly et al. (1992) introduced the concept of gender-role congruency. These researchers defined gender-role congruency as the extent to which leaders behave in a manner that is congruent with gender-role expectations. For instance, female leaders who display a feminine leadership style would be considered gender-role congruent. The theory suggests that gender-role congruent leaders would receive positive leadership ratings, while gender incongruent leaders might receive lower ratings. For instance, to the extent that women lead with a masculine style, they may exacerbate perceived role conflict and increase the likelihood of receiving unfairly negative evaluations of their performance. Despite the implications of the gender-role congruency theory, the current finding indicated that officers tend to favor a male leader who displayed a gender incongruent leadership style. There may be a double standard being applied to gender-role congruency in leadership styles.

While Eagly et al. (1992) introduced the concept of gender-role congruency, they also discussed a potential double standard in leader gender-role congruency. The authors suggested that the role of a leader might be viewed in masculine terms, which might count against a female leader regardless of the leadership style displayed. On the other hand, since the leader role may be primarily conceptualized as a masculine role, male leaders might be given more latitude to display a range of leadership styles. This may

give the male leader latitude to display a gender-incongruent leadership style without being negatively evaluated. This might explain why officers in the current study tended to favor a male leader who displayed a gender incongruent leadership style. In addition to men potentially being afforded greater latitude in their leadership style, officers may just prefer a democratic leadership style. Knowing each officer's personal leadership style would have allowed for a better understanding of this finding.

As noted previously, not all research has supported the gender-role congruency hypothesis. For instance, Luthar (1996) studied the impact of autocratic and democratic leadership styles on the perception of how well male and female managers perform. In general, democratic managers were perceived to be much higher performers when compared to autocratic managers. This seems to indicate that, all other things being equal, people may simply prefer democratic over autocratic leaders, regardless of the sex of the leader. While leadership style seemed to be a salient factor in determining male leadership evaluations, gender-role attitudes seemed to be important for predicting female leadership evaluations.

In the current study, the more female officers held traditional views of men needing status, while holding non-traditional views of women in society, men needing toughness and men displaying feminine qualities, the higher the ratings provided to female leaders. It should not be surprising that predominately non-traditional female officers would provide higher evaluations for women holding a non-traditional role (e.g., military leader), since they themselves hold positions that are non-traditional. Some studies have confirmed this hypothesis. For example, McGlashan et al. (1995) discovered

that the more non-traditional a rater's gender-role attitude toward women in business, the higher the female manager's performance rating. Similarly, in a military study, Rice et al. (1980) reported that group members who held very traditional gender-role attitudes were more likely to devalue the role of their female leader in regards to group accomplishment. However, respondents with more non-traditional views toward women's roles often favored female leaders with regard to these attributional judgments. In these studies, evaluators with non-traditional gender-role attitudes provided higher ratings for female leaders than their more traditional counterparts. Not only did non-traditional gender-role attitudes toward women impact female leader evaluations, a number of non-traditional gender-role attitudes toward men also impacted leadership evaluations provided to women.

In this study, the more female officers believed that men do not need to be tough and can engage in feminine activities, the higher the leadership evaluations provided to female leaders. It may be that female officer's non-traditional gender-role attitudes toward women may be generalized toward their views of men in society. As noted previously, Robinson Kurpius and Lucart (2000) found that although male military students held the most traditional gender-role attitude, as compared to civilian students, military women's gender-role attitudes were not significantly different than those held by civilian students. Specifically, female military students' attitude toward men not needing to be tough and engaging in feminine activities were not significantly different than their civilian peers. So, female officers' non-traditional gender-role attitudes toward women, which lead to higher leadership evaluations for women, might also be generalized to male

gender-role attitudes. The only exception to female officers' non-traditional gender-role attitudes predicting higher female leader evaluations is the male attitude toward men needing status.

In this study, the more female officers held traditional gender-role attitudes toward men needing status, the higher the ratings provided to female leaders. As noted previously, it is understandable why female officers holding non-traditional gender-role attitudes would provide higher leadership evaluations to female leaders, since the officers themselves hold non-traditional positions. Yet, for these same officers, the traditional belief that men need status was related to higher leadership ratings for women. The concept of men needing status, in contrast to men needing to be tough or not engaging in feminine activities, seems to be a salient feature in leadership evaluations for women. It may be that women view the leadership role as high in status or prestige, therefore projecting a traditional male gender-role attitude on the position regardless of the person occupying that position. As noted previously, the leader role is often perceived as requiring masculine characteristics (Powell et al., 2002). In a study examining gender-stereotypic attributes and occupations, Cejka & Eagly (1999) found that occupations were given higher prestige if the participants believed that the occupations required masculine personality or cognitive attributes. So, the military leadership position, which may often be viewed in masculine terms, is also viewed as a prestigious or high status position. Consequently, female officers may project their traditional gender-role attitude toward status onto the leadership position, even when female leaders occupy that position.

Although many interesting patterns emerged in this study, a number of hypotheses were not confirmed. The first hypothesis predicted that female leaders would be rated significantly lower in military leadership evaluations than would male leaders. Similarly, the second hypothesis stated that male and female officers would differentially evaluate male and female leaders. Neither of these hypotheses were confirmed by this study. In other words, female leaders were not rated significantly lower than male leaders, and there was no significant difference between the ratings provided by male and female leaders. Despite the finding that male officers tend to hold more traditional gender-role attitudes than their female counterparts, they may be able to set those attitudes aside and rate leaders equivalently regardless of the leader's sex. Perhaps male officer awareness of gender disparities in the military, which have been highlighted in the media and emphasized by the military leadership through equal opportunity training, has led to more parity in leadership ratings. These are not the only findings that were not supported by the current study.

The third hypothesis predicted that female leaders displaying an autocratic leadership style would be rated significantly lower in military leadership evaluations than all other types of leaders. This study found no significant differences between the evaluations given to gender incongruent female leaders and other types of leaders. As noted previously, Eagly et al. (1992) introduced the concept of gender incongruence in relation to leadership evaluations. At the same time, they suggested that male leaders might be given more latitude to display a range of leadership styles. This latitude might now be extended to female leaders, such that leadership style may not be as salient as the

leader's results to evaluations. Military officers might be paying less attention to gender-role congruency and more attention to leadership outcomes. This seems further supported by the finding that the elements of gender-role congruency, namely officer sex and leadership style, did not significantly predict leadership scores for female leaders. Only the gender-role attitudes of female officers significantly predicted evaluations for female leaders.

A few potential limitations of this study should be noted. The first limitation involves the use of paper and pencil measures. Although there are no behavioral measures available for examining gender-role attitude measures, care should be taken with self-report data. Another limitation concerns the artificiality of the leadership rating. Military promotions are conducted in a highly structured setting with many rules and traditions. This study did not attempt to simulate all of the facets of a military promotion board, so generalizability to this context is not tenable. The final limitation involves a limited range of scores on the leadership measure, with many scores falling close to the "neutral" leadership rating. The officers may have been suspicious about the nature of the experiment and how the data might be used, so they may have been reserved in their evaluations. This restricted range of scores may have impacted the relationship of leadership evaluation ratings to other variables in the study.

Future research in this area should address the following important topics. In order to simulate a promotion board atmosphere, role-plays should be considered to enhance the realism of the experience. The second research consideration is the participants. Although this study included field-grade officers in the Air Force, the

majority represented junior field-grade officers. Future research in military leadership evaluations should include larger samples of very senior military officers, including those officers who regularly sit on promotion boards. The final suggestion for future research concerns the leadership evaluation measure. In this study, the measure, developed to assess Air Force leadership, produced a very restricted range of evaluations. Future research should continue to develop measures that more accurately reflect Air Force leadership, as well as provide a range of leadership evaluation scores.

In summary, a number of patterns emerged in this study. For male officers, traditional views of women in society were significantly related to traditional views of men in society. Likewise, male officers reported more traditional gender-role attitudes than female officers concerning men needing status, men not engaging in feminine activities, and attitudes toward women. It should not be surprising that male officers were more traditional than female officers, since the military itself is viewed as a traditional role for men and a non-traditional role for women. With regards to leadership evaluations, differing pictures arose for male and female leaders. For male leaders, those with a democratic style tended to be rated higher in leadership evaluations than those with an autocratic style. As for female leaders, the more non-traditionally the female officers thought about the roles of men and women in society (except for men needing status), the higher the ratings given to women occupying a leadership position. While leadership style seemed to be a salient factor in determining male leadership evaluations, gender-role attitudes seemed to be important for predicting female leadership evaluations. It was encouraging to note that despite a culture predominately populated with members

who tend to hold traditional attitudes about the role of men and women in society, this study seemed to indicate no bias against women in military leadership roles.

In conclusion, these findings offer counseling psychologists the opportunity to make significant contributions to the military leadership evaluation process. Psychologists could aid senior military officers by helping them become more aware of factors that may unwittingly influence their promotion decisions. Specifically, psychologists could help female officers develop a greater awareness of the potential influence their gender-role attitudes may have on their evaluations of female leaders. Likewise, psychologists could enhance male officers' awareness of their potential tendency to rate autocratic male leaders lower than democratic male leaders. By providing a greater understanding of these tendencies, psychologists may enhance officers' ability to provide effective leadership evaluations.

## References

Adams, J. (1984). Women at West Point: A three-year perspective. *Sex Roles, 11*(5-6), 525-541.

Adams, J., Rice, R. W. & Instone, D. (1984). Follower attitudes toward women and judgments concerning performance by female and male leaders. *Academy of Management Journal, 27*, 636-643.

Anderson, L. R., Finn, M., & Leider, S. (1981). Leadership style and leader title. *Psychology of Women Quarterly, 5*, 661-669.

Arkin, W. & Dobrofsky, L. R. (1978). Military socialization and masculinity. *Journal of Social Issues, 34*(1), 151-168.

Bales, R. F. (1950). *Interaction process analysis: A method for the study of small groups*. Reading, MA: Addison-Wesley.

Bartol, K. M. (1978). The sex structuring of organizations: A search for possible causes. *Academy of Management Review, 3*, 805-815.

Bartol, K. M. & Butterfield, D. A. (1976). Sex effects in evaluating leaders. *Journal of Applied Psychology, 61*, 446-454.

Beere, C. A. (1990). *Gender roles: A handbook of tests and measures*. Westport, CT: Greenwood Press.

Bem, S. L. (1974). The measurement of psychological androgyny. *Journal of Consulting and Clinical Psychology, 42*, 155-162.

Bem, S. L. (1979). Theory and measurement of androgyny: A reply to the Pedhazur-Tetenbaum and Locksley-Colten critiques. *Journal of Personality and Social Psychology, 37*, 1047-1054.

Bem, S. L. (1981). Gender schema theory: A cognitive account of sex typing. *Psychological Review, 88*, 354-364.

Bem, S. L. (1993). *The lenses of gender: Transforming the debate on sexual inequality*. New Haven, CT: Yale University Press.

Bem, S. L. & Bem, D. J. (1970). Case study of a nonconscious ideology: Training the woman to know her place. In D. J. Bem (Ed.), *Beliefs, attitudes, and human affairs*. Belmont, CA: Brooks/Cole.

Boldry, J., Wood, W. & Kashy, D. A. (2001). Gender stereotypes and the evaluation of men and women in military training. *Journal of Social Issues, 57*(4), 689-705.

Brannon, R. (1976). The male sex role: Our culture's blueprint for manhood: What it's done for us lately. In D. David & R. Brannon (Eds.), *The forty-nine percent majority: The male sex role* (pp. 1-45). Reading, MA: Addison-Wesley.

Brannon, R. & Juni, S. (1984). A scale for measuring attitudes about masculinity. *Psychological Reports, 14*, 6-7.

Cann, A. & Siegfried, W. D. (1990). Gender stereotypes and dimensions of effective leadership behavior. *Sex Roles, 23*, 413-419.

Catalyst. (1998). *Census of women corporate officers and top earners*. New York: Author.

Cecil, A. G. (1996). *Comparing male cadet attitudes for masculinity ideology within civilian and military college environments*. Unpublished doctoral dissertation, Arizona State University, Tempe.

Cejka, M. A. & Eagly, A. H. (1999). Gender-stereotypic images of occupations correspond to the sex segregation of employment. *Personality and Social Psychology Bulletin, 25*, 413-423.

Cellar, D. F., Sidle, S., Goudy, K., & O'Brien, D. (2001). Effects of leader style, leader sex, and subordinate personality on leader evaluations and future subordinate motivation. *Journal of Business and Psychology, 16*(1), 61-72.

Cooper, V. W. (1997). Homophily or the queen bee syndrome: Female evaluation of female leadership. *Small Group Research, 28*, 483-499.

Deal, J. J. & Stevenson, M. A. (1998). Perceptions of female and male managers in the 1990s: Plus ca change... *Sex Roles, 38*, 287-300.

DeFlueur, L. & Gillman, D. (1978). Cadet beliefs, attitudes, and interactions during the early phases of sex integration. *Youth and Society, 10*, 607-622.

DeFlueur, L., Gillman, D., & Marshak, W. (1978). Sex integration of the U.S. Air Force Academy: Changing roles for women. *Armed Forces and Society, 4*(4), 607-622.

Dunivin, K. O. (2000). Military Culture: Change and Continuity. *Military Leadership: in Pursuit of Excellence*. Boulder, CO: Westview Press.

Durning, K. P. (1978). Women at the Naval Academy: An attitude survey. *Armed Forces and Society, 4*(4), 569-588.

Eagly, A. H. & Mladinic, A. (1989). Gender stereotypes and attitude toward women and men. *Personality and Social Psychology Bulletin, 15*, 543-558.

Eagly, A. H., Karau, S. J., & Makhijani, M. G. (1995). Gender and the effectiveness of leaders: A meta-analysis. *Psychological Bulletin, 117*, 125-145.

Eagly, A. H. & Johnson, B. T. (1990). Gender and leadership style: A meta-analysis. *Psychological Bulletin, 108*, 233-256.

Eagly, A. H., Makhijani, M. G. & Klonsky, B. G. (1992). Gender and the Evaluation of Leaders: A Meta-Analysis. *Psychological Bulletin, 111*(1), 3-22.

Eagly, A. H., Wood, W., & Diekman, A. B. (2000). Social role theory of sex differences and similarities: A current appraisal. In T. Eckes & H. M. Trautner (Eds.), *The developmental social psychology of gender* (pp. 123-174). Mahwah, NJ: Erlbaum.

Giannantonio, C. M., Olian, J. D., & Carroll, S. J. (1995). An experimental study of gender and situational effects in a performance evaluation of a manager. *Psychological Reports, 76*, 1004-1006.

Gloria, A. M. (1993). *Psychosocial factors influencing the academic persistence of chicano/a undergraduates*. Unpublished doctoral dissertation, Arizona State University, Tempe.

Hartman, S. J., Griffeth, R. W., Crino, M. D., & Harris, O. J. (1992). Gender-based influences: The promotion recommendation. *Sex Roles, 25*(5-6), 285-300.

Heilman, M. E. (2001). Description and Prescription: How Gender Stereotypes Prevent Women's Ascent Up the Organizational Ladder, *Journal of Social Issues, 57*, 657-675.

Heilman, M. E., Block, C. J., & Martell, R. F. (1995). Sex stereotypes: Do they influence perceptions of managers? *Journal of Social Behavior and Personality, 10*, 237-252.

Heilman, M. E., Block, C. J., Martell, R. F., & Simon, M. C. (1989). Has anything changed? Current characterizations of men, women, and managers. *Journal of Applied Psychology, 74*, 935-942.

Kushell, E. & Newton, R. (1986). Gender, leadership style, and subordinate satisfaction: An experiment. *Sex Roles, 14*, 203-209.

Larwood, L., Glasser, E., & McDonald, R. (1980). Attitudes of male and female cadets toward military sex integration. *Sex Roles, 6*, 381-390.

Lee, D. M. & Alvares, K. M. (1977). Effects of sex on descriptions and evaluations of supervisory behavior in a simulated industrial setting. *Journal of Applied Psychology, 62*, 405-410.

Lewin, K. & Lippitt, R. (1938). An experimental approach to the study of autocracy and democracy: A preliminary note. *Sociometry, 1*, 292-300.

Lopez-Zafra, E. & Del-Olmo-Ablanedo, S. M. (1999). Gender stereotype and transformational leadership in typical feminine work contexts. *Sociedad Valenciana de Psicología Social, 9(3)*, 53-71.

Luthar, H. K. (1996). Gender differences in evaluation of performance and leadership ability: Autocratic vs. democratic managers. *Sex Roles, 5/6*, 337-161.

McGlashan, K. E., Wright, P. M. & McCormick, B. (1995). Preferential selection and stereotypes: Effects on evaluation of female leader performance, subordinate goal commitment, and task performance. *Sex Roles, 33(9-10)*, 669-686.

Mobley, W. H. (1982). Supervisor and employee race and sex effects on performance appraisals: A field study of adverse impact and generalizability. *Academy of Management Journal, 25*, 598-606.

Mohr, E. S. & Downey, R. G. (1977). Are women peers? *Journal of Occupational Psychology, 50*(1), 53-57.

Mohr, E. S., Rowan, G. P., & Reidy, R. F. (1978). Women and ROTC summer camp, 1975. *US Army Research Institute for the Behavioral and Social Sciences, TP 293*: 16 pp.

Morrison, A. M. & Von Glinow, M. A. (1990). Women and minorities in managements. *American Psychologist, 45*(2), 200-208

O'Neil (1981). Patterns of gender-role conflict and strain: Sexism and fear of femininity in men's lives. *Personnel and Guidance Journal, 60*, 203-210.

Peters, L. H. (1984). Sex bias and managerial evaluations: A replication and extension. *Journal of Applied Psychology, 69*(2), 349-352.

Powell, G. N. (1999). Reflections on the glass ceiling: Recent trends and future prospects. In G. Powell (Ed.), *Handbook of Gender and Work* (pp. 325-345). Thousand Oaks, CA: Sage Publications, Inc.

Powell, G. N. & Butterfield, D. A. (1979). The "good manager": Masculine or androgynous? *Academy of Management Journal, 22*, 395-403.

Powell, G. N. & Butterfield, D. A. (1989). The "good manager": Did androgyny fare better in the 1980s? *Group and Organization Studies, 14*, 216-233.

Powell, G. N., Butterfield, D. A., & Parent, J. D. (2002). Gender and managerial stereotypes: Have the times changed? *Journal of Management, 28*(2), 177-193.

Priest, R. F., Vitters, A. G., & Prince, H. T. (1978). Coeducation at West Point. *Armed Forces and Society, 4*, 589-606.

Pulakos, E. D., White, L. A., Oppler, S. H., & Borman, W. C. (1989). Examination of race and sex effects on performance ratings. *Journal of Applied Psychology, 74*, 770-780.

Rice, R. W., Bender, L. R., & Vitters, A. G. (1980). Leader sex, follower attitudes toward women, and leadership effectiveness: A laboratory experiment. *Organizational Behavior and Human Decision Processes, 25*(1), 46-78.

Rice, R. W., Yoder, J. D., Adams, J., Priest, R. F. & Prince, H. T. (1984). Leadership Ratings for Male and Female Military Cadets. *Sex Roles, 10*(11-12), 885-901.

Robinson Kurpius, S. E. & Lucart, A. (2000). Military and Civilian Undergraduates: Attitudes Toward Women, Masculinity, and Authoritarianism. *Sex Roles, 43*(3/4), 255-265.

Robinson Kurpius, S. E., Lucart, A., & Looney, J. D. (in press). Military leadership evaluations: Effects of sex and gender-role attitudes. *Journal of Consulting Psychology*.

Rojahn, K. & Willemse, T. M. (1994). The evaluation of effectiveness and likeability of gender-role congruent and gender-role incongruent leaders. *Sex Roles, 30*, 109-119.

Savell, J. M., Woelfel, J. C., Collins, B. E., & Bentler, P. M. (1979). A study of male and female soldiers' beliefs about the appropriateness of various jobs for women in the army. *Sex Roles, 5*, 41-50.

Shore, T. H. (1992). Subtle gender bias in the assessment of managerial potential. *Sex Roles, 27*, 499-515.

Shore, L. M. & Thorton, G. C. (1986). Effects of gender on self- and supervisory ratings. *Academy of Management Journal, 29*, 115-129.

Spence, J. T. & Hahn, E. D. (1997). The attitudes toward women scale and attitude change in college students. *Psychology of Women Quarterly, 21*, 17-34.

Spence, J. T. & Helmreich, R. L. (1972). The Attitudes Toward Women Scale: An objective instrument to measure the attitudes toward the rights and roles of women in contemporary society. *JSAS: Catalog of Selected Documents in Psychology, 2*, 66-67 (Ms. No. 153).

Spence, J. T. & Helmreich, R. L. (1978). *Masculinity and femininity*. Austin: University of Texas.

Spence, J. T., Helmreich, R. L. & Strapp, J. (1973). A short version of the Attitude Toward Women Scale (AWS). *Psychonomic Society Bulletin, 2(4)*, 219-220.

Stevens, G. & Gardner, H. (1987). But can she command a ship? Acceptance of women by peers at the Coast Guard Academy. *Sex Roles, 16(3-4)*, 181-188.

Thomas, P. J. (1987). Appraising the Performance of Women: Gender and the Naval Officer. *Women's Career Development*. Sage Publications.

Thompson, E. H. (1990). Courtship violence and the male role. *Men's Studies Review, 7*, 4-13.

Thompson, E. H. & Pleck, J. H. (1986). The structure of male role norms. *American Behavioral Scientist, 29*, 531-543.

Thompson, E. H. & Pleck, J. H. (1995). Masculinity ideologies: A review of research instrumentation on men and masculinities. In R. Levant & W. Pollack (Eds.), *A new psychology of men* (pp. 129-163). NY: Basic Books.

Thompson, E. H., Pleck, J. H. & Ferrera, D. L. (1992). Men and masculinities: Scales for masculinity ideology and masculinity-related constructs. *Sex Roles*, 27(11/12), 573-607.

Thompson, M. D. (2000). Gender, leadership orientation, and effectiveness: Testing the theoretical models of Bolman & Deal and Quinn. *Sex Roles*, 42(11-12), 969-992.

Tsui, A. S. & Gutek, B. A. (1985). A role set analysis of gender differences in performance, affective relationships, and career success of industrial middle managers. *Academy of Management Journal*, 27, 619-635.

United States Air Force. (2003). *Current active Air Force officers* [On-line]. Available: <http://www.afpc.randolph.af.mil/demographics/demograff/GENOFF.html>

United States Army. (2003). *Women in the Army statistics* [On-line]. Available: <http://www.odcsper.army.mil/default.asp?pageid=25f>

United States Department of Labor, Bureau of Labor Statistics. (1983). *Handbook of labor statistics* (pp. 44-48, Table 16). Washington, DC: Government Printing Office.

United States Department of Labor. (1991). *A report on the Glass Ceiling Initiative*. Washington, DC: Author.

United States Department of Labor. (1998). *Women in management*. Washington, DC: Author.

United States Marine Corps. (2003). *Marine Corps officers* [On-line]. Available: <http://www.usmc.mil.html>

United States Navy. (2003). *Navy active duty officers* [On-line]. Available: <http://www.bupers.navy.mil/mentor/officerrank.html>

Woehr, D. J. & Roch, S. G. (1996). Context effects in performance evaluation: The impact of ratee sex and performance level on performance ratings and behavioral recall. *Organizational Behavior and Human Decision Processes*, 66, 31-41.

Wood, M. E. (2000). Examination of the role of sexism in the overvaluation of female leaders. *Dissertation Abstracts International*, 60(8-B): 4285.

Yoder, J. D., Rice, R. W., Adams, J., Priest, R. F., & Prince, H. T. II (1982). Reliability of the Attitudes Toward Women Scale (AWS) and the Personal Attributes Questionnaire (PAQ). *Sex Roles*, 8(6), 651-657.

APPENDIX A  
CONSENT FORM

Dear Participant,

I am an Air Force Institute of Technology graduate student under the direction of Professor Sharon Robinson Kurpius in the Department of Counseling Psychology, College of Education, at Arizona State University. I am conducting a research study examining military leadership evaluations.

I am requesting your participation, which will involve assessing an Air Force Promotion Recommendation and completing three short questionnaires. The experiment should take no more than 30 minutes to complete. Your participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, there will be no penalty. The results of the research study may be published, but your name will not be used.

Although there may be no direct benefit to you, the possible benefit of your participation is to better understand how officers assess military leadership.

If you have any questions concerning the research study, please call me at (623) 536-6005 or Dr. Robinson Kurpius at (480) 965-6104.

Sincerely,

JOSEPH D. LOONEY, Capt, USAF

By signing below you are giving consent to participate in the above study.

---

Signature

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Printed Name

---

Date

If you have any questions about your rights as a subject/participant in this research, you can contact the Chair of the Human Subjects Institutional Review Board, through Karol Householder, at (480) 965-6788.

#### Privacy Notice

In accordance with Privacy Act of 1974 (Public Law 93-579), this notice informs you of the purpose of the survey and how the findings will be used. Please read it carefully.

**Authority:** 10 United States Code, Sections 136 and 2358

**Principle Purpose:** Information collected in this survey will be used to examine military leadership evaluations. Reports will be provided be provided to the Division of Psychology (CPY) in Education at Arizona State University. Some findings may be published in professional journals or presented at scientific conferences.

**Routine Uses:** None

**Disclosure:** Participation in this research study is voluntary. There is not penalty if you choose not to respond. The results of this study may be published, but only group statistics will be reported and your name will not be used.

APPENDIX B  
PROMOTION RECOMMENDATION FORMS

| PROMOTION RECOMMENDATION  |  |   |                                |                                       |
|---|--|---|--------------------------------|---------------------------------------|
| <b>I. RATEE IDENTIFICATION DATA</b> (Read AFI 36-2406 carefully before filling in any item)   |  |   |                                |                                       |
| 1. NAME (Last, First, Middle Initial)<br><b>Smith, Jennifer</b>   | 2. SSN<br><b>123-45-6789</b>             | 3. GRADE<br><b>Capt</b>   | 4. DAFSC<br><b>13S4</b>        |                                       |
| 5. ORGANIZATION, COMMAND, LOCATION Cheyenne Mountain Operations Center (CMOC)<br><b>NORAD/USSPACECOM</b> , Cheyenne Mountain Air Station CO   |  |   | 6. PAS CODE<br><b>AB12C34D</b> |                                       |
| <b>II. UNIT MISSION DESCRIPTION</b><br>Executes NORAD/USSPACECOM aerospace warning, attack assessment, and space control missions. Supports National Command Authorities of the United States and Canada with threat determination for air, missile, space events worldwide and ensures air sovereignty. Provides US and allied forces access to space and denies enemy exploitation of space. Directs current operations through six combat centers.   |  |   |                                |                                       |
| <b>III. JOB DESCRIPTION</b><br>1. DUTY TITLE:<br><b>CHIEF, EXERCISE DEVELOPMENT SECTION</b><br>2. KEY DUTIES, TASKS, RESPONSIBILITIES: Leads six enlisted personnel in implementing CMOC's synthetic exercise program for six NORAD/USSPACECOM workcenters and 280 mission-ready personnel. Plans, develops, schedules, and conducts internal exercises and VIP demonstrations for strategic and theater missile warning, atmospheric defense, and space surveillance operations on CMOC's \$1.8B computer system. Develops all simulation media and voice scripts for CMOC and Alternate Missile Warning Center training exercises and crew evaluations. As CMOC Exercise Director, briefs staff and crews and simulates agencies including JCS and NSA. Manages all exercise development hardware and software issues.  |  |   |                                |                                       |
| <b>IV. PROMOTION RECOMMENDATION</b><br><ul style="list-style-type: none"> <li>- Capable officer--knowledgeable missileer, adept staff officer and directive section chief; well-rounded</li> <li>- Proficient operator! She completed over 250 Missile Alerts with zero deficiencies--sustained performer</li> <li>-- Independent leader's decisions needed no team input; her leadership led to unit's outstanding IG rating</li> <li>- Fine staffer! Self-reliant research, writing, and briefing skills key to successful completion on many OIs</li> <li>-- Relies on own expertise--authored MOA defining exercise relationship to NORAD/USSPACECOM</li> <li>- Commanding section chief--she unilaterally sets group objectives and clear timelines; productive section</li> <li>-- Directed her team to create 7 new training exercises--contributed to high unit mission-ready status</li> <li>-- Self-sufficient problem solving during exercise--her team's performance led to Outstanding Unit Award</li> <li>- Competent officer and leader--challenge Jennifer with increased responsibility; promote and send to ISS!</li> </ul> |  |   |                                |                                       |
| BPZ <input type="checkbox"/>  | IAPZ <input checked="" type="checkbox"/> | VI. GROUP SIZE<br><b>N/A</b>  | VII. BOARD<br><b>A1234B</b>    | VIII. SENIOR RATER ID<br><b>1A2BC</b> |
| <b>IX. OVERALL RECOMMENDATION</b>   |  | <b>X. SENIOR RATER</b><br>NAME, GRADE, BR OF SVC, ORGN, COMD & LOCATION<br><b>Mage R. General, Maj Gen, USAF<br/>CMOC, NORAD/USSPACECOM<br/>Cheyenne Mountain Operations Center</b><br>DUTY TITLE<br><b>Commander</b><br>SSN<br><b>9876</b> SIGNATURE |                                |                                       |
| <b>Instructions</b><br>Review previous OERs, OPRs, Education/Training Reports, and Supplemental Evaluation Sheets. Evaluate the officer's performance and assess his or her potential. Write Promotion Recommendation (Section IV) in concise "bullet" format. Enter only the last four numbers of senior rater's SSN.  |  |   |                                |                                       |
| Provide an accurate, unbiased assessment free from consideration of race, sex, ethnic origin, age, religion, or marital status.   |  |   |                                |                                       |
| Provide the officer a copy of this report approximately 30 days prior to the board for which this report is prepared.   |  |   |                                |                                       |

| PROMOTION RECOMMENDATION  |   |  |                         |                                |
|---|---|--|-------------------------|--------------------------------|
| <b>I. RATEE IDENTIFICATION DATA</b> (Read AFI 36-2406 carefully before filling in any item)   |   |  |                         |                                |
| 1. NAME (Last, First, Middle Initial)<br>Smith, Jennifer  | 2. SSN<br>123-45-6789                     | 3. GRADE<br>Capt   | 4. DAFSC<br>13S4        |                                |
| 5. ORGANIZATION, COMMAND, LOCATION Cheyenne Mountain Operations Center (CMOC)<br>NORAD/USSPACECOM, Cheyenne Mountain Air Station CO   |   |  | 6. PAS CODE<br>AB12C34D |                                |
| <b>II. UNIT MISSION DESCRIPTION</b><br>Executes NORAD/USSPACECOM aerospace warning, attack assessment, and space control missions. Supports National Command Authorities of the United States and Canada with threat determination for air, missile, space events worldwide and ensures air sovereignty. Provides US and allied forces access to space and denies enemy exploitation of space. Directs current operations through six combat centers.   |   |  |                         |                                |
| <b>III. JOB DESCRIPTION</b><br><b>1. DUTY TITLE</b><br><b>CHIEF, EXERCISE DEVELOPMENT SECTION</b><br><b>2. KEY DUTIES, TASKS, RESPONSIBILITIES:</b> Leads six enlisted personnel in implementing CMOC's synthetic exercise program for six NORAD/USSPACECOM workcenters and 280 mission-ready personnel. Plans, develops, schedules, and conducts internal exercises and VIP demonstrations for strategic and theater missile warning, atmospheric defense, and space surveillance operations on CMOC's \$1.8B computer system. Develops all simulation media and voice scripts for CMOC and Alternate Missile Warning Center training exercises and crew evaluations. As CMOC Exercise Director, briefs staff and crews and simulates agencies including JCS and NSA. Manages all exercise development hardware and software issues.   |   |  |                         |                                |
| <b>IV. PROMOTION RECOMMENDATION</b><br><ul style="list-style-type: none"> <li>- Capable officer--knowledgeable missileer, adept staff officer and collaborative section chief; well-rounded</li> <li>- Proficient operator! She completed over 250 Missile Alerts with zero deficiencies--sustained performer               <ul style="list-style-type: none"> <li>-- Participative leader who seeks team input for decisions; her leadership led to unit's outstanding IG rating</li> </ul> </li> <li>- Fine staffer! Consensus-building research, writing, and briefing skills key to completion of many OIs</li> <li>-- Relies on team expertise--authored MOA defining exercise relationship to NORAD/USSPACECOM</li> <li>- Team-oriented section chief--she negotiates group objectives and clear timelines; productive section               <ul style="list-style-type: none"> <li>-- Worked with her team to create 7 new training exercises--contributed to high unit mission-ready status</li> <li>-- Led group problem solving during exercise--her team's performance led to Outstanding Unit Award</li> </ul> </li> <li>- Competent officer and leader--challenge Jennifer with increased responsibility; promote and send to ISS</li> </ul> |   |  |                         |                                |
| BPZ <input type="checkbox"/>  | IIAPZ <input checked="" type="checkbox"/> | VI. GROUP SIZE<br>N/A  | VII. BOARD<br>A1234B    | VIII. SENIOR RATER ID<br>1A2BC |
| <b>IX. OVERALL RECOMMENDATION</b>   |   | <b>X. SENIOR RATER</b><br>NAME, GRADE, BR OF SVC, ORGN, COMD & LOCATION<br>Mage R. General, Maj Gen, USAF<br>CMOC, NORAD/USSPACECOM<br>Cheyenne Mountain Operations Center<br><br>DUTY TITLE<br>Commander<br><br>SSN <input type="text" value="9876"/> SIGNATURE |                         |                                |
| <b>Instructions</b><br>Review previous OERs, OPRs, Education/Training Reports, and Supplemental Evaluation Sheets. Evaluate the officer's performance and assess his or her potential. Write Promotion Recommendation (Section IV) in concise "bullet" format. Enter only the last four numbers of senior rater's SSN.  |   |  |                         |                                |
| Provide an accurate, unbiased assessment free from consideration of race, sex, ethnic origin, age, religion, or marital status.   |   |  |                         |                                |
| Provide the officer a copy of this report approximately 30 days prior to the board for which this report is prepared.   |   |  |                         |                                |

| PROMOTION RECOMMENDATION  |   |   |                      |                                |
|---|---|---|----------------------|--------------------------------|
| <b>I. RATEE IDENTIFICATION DATA</b> (Read AFI 36-2406 carefully before filling in any item)   |   |   |                      |                                |
| 1. NAME (Last, First, Middle Initial)<br>Smith, John Q.   |   | 2. SSN<br>123-45-6789   | 3. GRADE<br>Capt     | 4. DAFSC<br>13S4               |
| 5. ORGANIZATION, COMMAND, LOCATION Cheyenne Mountain Operations Center (CMOC)<br>NORAD/USSPACECOM, Cheyenne Mountain Air Station CO   |   | 6. PAS CODE<br>AB12C34D   |                      |                                |
| <b>II. UNIT MISSION DESCRIPTION</b><br>Executes NORAD/USSPACECOM aerospace warning, attack assessment, and space control missions. Supports National Command Authorities of the United States and Canada with threat determination for air, missile, space events worldwide and ensures air sovereignty. Provides US and allied forces access to space and denies enemy exploitation of space. Directs current operations through six combat centers.   |   |   |                      |                                |
| <b>III. JOB DESCRIPTION</b><br>1. DUTY TITLE<br><b>CHIEF, EXERCISE DEVELOPMENT SECTION</b><br>2. KEY DUTIES, TASKS, RESPONSIBILITIES: Leads six enlisted personnel in implementing CMOC's synthetic exercise program for six NORAD/USSPACECOM workcenters and 280 mission-ready personnel. Plans, develops, schedules, and conducts internal exercises and VIP demonstrations for strategic and theater missile warning, atmospheric defense, and space surveillance operations on CMOC's \$1.8B computer system. Develops all simulation media and voice scripts for CMOC and Alternate Missile Warning Center training exercises and crew evaluations. As CMOC Exercise Director, briefs staff and crews and simulates agencies including JCS and NSA. Manages all exercise development hardware and software issues.   |   |   |                      |                                |
| <b>IV. PROMOTION RECOMMENDATION</b><br><ul style="list-style-type: none"> <li>- Capable officer--knowledgeable missileer, adept staff officer and directive section chief; well-rounded</li> <li>- Proficient operator! He completed over 250 Missile Alerts with zero deficiencies--sustained performer</li> <li>-- Independent leader's decisions needed no team input; his leadership led to unit's outstanding IG rating</li> <li>- Fine staffer! Self-reliant research, writing, and briefing skills key to successful completion on many OIs</li> <li>-- Relies on own expertise--authored MOA defining exercise relationship to NORAD/USSPACECOM</li> <li>- Commanding section chief--he unilaterally sets group objectives and clear timelines; productive section</li> <li>-- Directed his team to create 7 new training exercises--contributed to high unit mission-ready status</li> <li>-- Self-sufficient problem solving during exercise--his team's performance led to Outstanding Unit Award</li> <li>- Competent officer and leader--challenge John with increased responsibility; promote and send to ISS!</li> </ul> |   |   |                      |                                |
| BPZ <input type="checkbox"/>  | I/APZ <input checked="" type="checkbox"/> | VI. GROUP SIZE<br>N/A   | VII. BOARD<br>A1234B | VIII. SENIOR RATER ID<br>1A2BC |
| <b>IX. OVERALL RECOMMENDATION</b>   |   | <b>X. SENIOR RATER</b><br>NAME, GRADE, BR OF SVC, ORGN, COMD & LOCATION<br>Major R. General, Maj Gen, USAF<br>CMOC, NORAD/USSPACECOM<br>Cheyenne Mountain Operations Center<br>DUTY TITLE<br><b>Commander</b><br>SSN<br>9876      SIGNATURE |                      |                                |
| <b>Instructions</b><br>Review previous OERs, OPRs, Education/Training Reports, and Supplemental Evaluation Sheets. Evaluate the officer's performance and assess his or her potential. Write Promotion Recommendation (Section IV) in concise "bullet" format. Enter only the last four numbers of senior rater's SSN.  |   |   |                      |                                |
| Provide an accurate, unbiased assessment free from consideration of race, sex, ethnic origin, age, religion, or marital status.   |   |   |                      |                                |
| Provide the officer a copy of this report approximately 30 days prior to the board for which this report is prepared.   |   |   |                      |                                |

| PROMOTION RECOMMENDATION  |   |  |                         |  |
|---|---|--|-------------------------|--|
| <b>I. RATEE IDENTIFICATION DATA</b> (Read AFI 36-2406 carefully before filling in any item)   |   |  |                         |  |
| 1. NAME (Last, First, Middle Initial)<br>Smith, John Q.   | 2. SSN<br>123-45-6789                     | 3. GRADE<br>Capt   | 4. DAFSC<br>13S4        |  |
| 5. ORGANIZATION, COMMAND, LOCATION Cheyenne Mountain Operations Center (CMOC)<br>NORAD/USSPACECOM, Cheyenne Mountain Air Station CO   |   |  | 6. PAS CODE<br>AB12C34D |  |
| <b>II. UNIT MISSION DESCRIPTION</b><br>Executes NORAD/USSPACECOM aerospace warning, attack assessment, and space control missions. Supports National Command Authorities of the United States and Canada with threat determination for air, missile, space events worldwide and ensures air sovereignty. Provides US and allied forces access to space and denies enemy exploitation of space. Directs current operations through six combat centers.   |   |  |                         |  |
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| <b>IV. PROMOTION RECOMMENDATION</b><br><ul style="list-style-type: none"> <li>- Capable officer--knowledgeable missileer, adept staff officer and collaborative section chief; well-rounded</li> <li>- Proficient operator! He completed over 250 Missile Alerts with zero deficiencies--sustained performer</li> <li>-- Participative leader who seeks team input for decisions; his leadership led to unit's outstanding IG rating</li> <li>- Fine staffer! Consensus-building research, writing, and briefing skills key to completion of many OIs</li> <li>-- Relies on team expertise--authored MOA defining exercise relationship to NORAD/USSPACECOM</li> <li>- Team-oriented section chief--he negotiates group objectives and clear timelines; productive section</li> <li>-- Worked with his team to create 7 new training exercises--contributed to high unit mission-ready status</li> <li>-- Led group problem solving during exercise--his team's performance led to Outstanding Unit Award</li> <li>- Competent officer and leader--challenge John with increased responsibility; promote and send to ISS</li> </ul> |   |  |                         |  |
| V. PROMOTION ZONE   | VI. GROUP SIZE                            | VII. BOARD   | VIII. SENIOR RATER ID   |  |
| BPZ <input type="checkbox"/>  | I/APZ <input checked="" type="checkbox"/> | N/A  | A1234B                  |  |
| IX. OVERALL RECOMMENDATION  |   | <b>X. SENIOR RATER</b><br>NAME, GRADE, BR OF SVC, ORGN, COMD & LOCATION<br><b>Mage R. General, Maj Gen, USAF</b><br><b>CMOC, NORAD/USSPACECOM</b><br><b>Cheyenne Mountain Operations Center</b><br>DUTY TITLE<br><b>Commander</b><br>SSN <b>9876</b> SIGNATURE |                         |  |
| <b>Instructions</b><br>Review previous OERs, OPRs, Education/Training Reports, and Supplemental Evaluation Sheets. Evaluate the officer's performance and assess his or her potential. Write Promotion Recommendation (Section IV) in concise "bullet" format. Enter only the last four numbers of senior rater's SSN.  |   |  |                         |  |
| Provide an accurate, unbiased assessment free from consideration of race, sex, ethnic origin, age, religion, or marital status.   |   |  |                         |  |
| Provide the officer a copy of this report approximately 30 days prior to the board for which this report is prepared.   |   |  |                         |  |

APPENDIX C  
DEMOGRAPHIC SHEET

# Demographic Data Sheet

**Please provide the following information about yourself:**

### Your ethnicity/race:

Native American/American Indian       Chicano/Latino/Hispanic  
 African American/Black       Multi-ethnic (please specify)  
 European American/White       Other (please specify)  
 Asian American/Pacific Islander

## Your religious/spiritual orientation:

- Catholic
- Protestant
- Latter Day Saints
- Jewish
- Islamic
- None
- Other (please specify)

### Your education level:

- Bachelor's Degree
- Post Bachelor's Coursework
- Master's Degree
- Post Master's Coursework
- Doctoral Degree
- Post Doctoral Coursework
- Other (please specify)

**Have you ever had a parent in the military?**      Y      N

**Your Military AFSC (Code and Title):**

## Your Years of Military Service:

**Have you ever been married to another military member?      Y      N**

Have you ever had a female military officer as your supervisor? Y N

**Have you ever had a male military officer as your supervisor? Y N**

**What was the sex of the Captain you rated for this experiment?**      M      F

### **How would you describe the leadership style of the Captain you rated?**

Democratic (Allows subordinates participation in decision making)

Autocratic (Discourages subordinates participation in decision making)

## APPENDIX D

### MEASURES

Please indicate your level of agreement with the items below using the following scale.

| Very Strongly<br>Disagree | Strongly<br>Disagree | Disagree | Neutral | Agree | Strongly<br>Agree | Very Strongly<br>Agree |
|---------------------------|----------------------|----------|---------|-------|-------------------|------------------------|
| 1                         | 2                    | 3        | 4       | 5     | 6                 | 7                      |

\_\_\_\_\_ 1. Success in his work has to be man's central goal in life.

\_\_\_\_\_ 2. The best way for a young man to get the respect of other people is to get a job, take it seriously, and do it well.

\_\_\_\_\_ 3. A man owes it to his family to work at the best-paying job he can get.

\_\_\_\_\_ 4. A man should generally work overtime to make more money whenever he has the chance.

\_\_\_\_\_ 5. A man always deserves the respect of his wife and children.

\_\_\_\_\_ 6. It is essential for man to always have the respect and admiration of everyone who knows him.

\_\_\_\_\_ 7. A man should never back down in the face of trouble.

\_\_\_\_\_ 8. I always like a man who's totally sure of himself.

\_\_\_\_\_ 9. A man should always think everything out coolly and logically, and have rational reasons for everything he does.

\_\_\_\_\_ 10. A man should always try to project an air of confidence even if he really doesn't feel confident inside.

\_\_\_\_\_ 11. A man must stand on his own two feet and never depend on other people to help him do things.

\_\_\_\_\_ 12. When a man is feeling a little pain he should try not to let it show very much.

\_\_\_\_\_ 13. Nobody respects a man very much who frequently talks about his worries, fears, and problems.

\_\_\_\_\_ 14. A good motto for a man would be "when the going gets tough, the tough get going."

\_\_\_\_\_ 15. I think a young man should try to become physically tough, even if he's not big.

\_\_\_\_\_ 16. Fists are sometimes the only way to get out of a bad situation.

\_\_\_\_\_ 17. A real man enjoys a bit of danger now and then.

\_\_\_\_\_ 18. In some kinds of situations a man should be ready to use his fists, even if his wife or his girlfriend would object.

\_\_\_\_\_ 19. A man should always refuse to get into a fight, even if there seems to be no way to avoid it.

\_\_\_\_\_ 20. It bothers me when a man does something that I consider "feminine."

\_\_\_\_\_ 21. A man whose hobbies are cooking, sewing, and going to the ballet probably wouldn't appeal to me.

\_\_\_\_\_ 22. It is a bit embarrassing for a man to have a job that is usually filled by a woman.

\_\_\_\_\_ 23. Unless he was really desperate, I would probably advise a man to keep looking rather than accept a job that is usually filled by a woman.

\_\_\_\_\_ 24. If I heard about a man who was a hairdresser and a gourmet cook, I might wonder how masculine he was.

\_\_\_\_\_ 25. I think it's extremely good for a boy to be taught to cook, sew, clean the house, and take care of younger children.

\_\_\_\_\_ 26. I might find it a little silly or embarrassing if a male friend of mine cried over a sad love scene in a movie.

The statements listed below describe attitudes toward the role of women in society that different people have. There are no right or wrong answers, only opinions. You are asked to express your feeling about each statement.

|                |              |                 |                   |
|----------------|--------------|-----------------|-------------------|
| Agree Strongly | Agree Mildly | Disagree Mildly | Disagree Strongly |
| 1              | 2            | 3               | 4                 |

- \_\_\_\_\_ 1. Swearing and obscenity are more repulsive in the speech of a woman than of a man.
- \_\_\_\_\_ 2. Women should take increasing responsibility for leadership in solving the intellectual and social problems of the day.
- \_\_\_\_\_ 3. Both husband and wife should be allowed the same grounds for divorce.
- \_\_\_\_\_ 4. Telling dirty jokes should be mostly a masculine prerogative.
- \_\_\_\_\_ 5. Intoxication among women is worse than intoxication among men.
- \_\_\_\_\_ 6. Under modern economic conditions with women being active outside the home men should share in household tasks such as washing dishes and doing the laundry.
- \_\_\_\_\_ 7. It is insulting to women to have the "obey" clause remain in the marriage service.
- \_\_\_\_\_ 8. There should be a strict merit system in job appointment and promotion without regard to sex.
- \_\_\_\_\_ 9. A woman should be as free as man to propose marriage.
- \_\_\_\_\_ 10. Women should worry less about their rights and more about becoming good wives and mothers.
- \_\_\_\_\_ 11. Women earning as much as their dates should bear equally the expense when they go out together.
- \_\_\_\_\_ 12. Women should assume their rightful place in business and all the professions along with men.
- \_\_\_\_\_ 13. A woman should not expect to go to exactly the same places or to have quite the same freedom of action as a man.
- \_\_\_\_\_ 14. Sons in a family should be given more encouragement to go to college than daughters.

\_\_\_\_ 15. It is ridiculous for a woman to run a locomotive and for a man to darn socks.

\_\_\_\_ 16. In general, the father should have greater authority than the mother in the bringing up of children.

\_\_\_\_ 17. Women should be encouraged not to become sexually intimate with anyone before marriage, even their fiancées.

\_\_\_\_ 18. The husband should not be favored by law over the wife in the disposal of family property or income.

\_\_\_\_ 19. Women should be concerned with their duties of childbearing and house tending, rather than with desires for professional and business careers.

\_\_\_\_ 20. The intellectual leadership of a community should be largely in the hands of men.

\_\_\_\_ 21. Economic and social freedom is worth far more to women than acceptance of the ideal of femininity which has been set up by men.

\_\_\_\_ 22. On the average, women should be disregarded as less capable of contributing to economic production than are men.

\_\_\_\_ 23. There are many jobs in which men should be given preference over women in being hired and promoted.

\_\_\_\_ 24. Women should be given equal opportunity with men for apprenticeship in the various trades.

\_\_\_\_ 25. The modern girl is entitled to the same freedom from regulation and control that is given to the modern boy.

Evaluate the attached PRF according to the following performance factors using the following scale:

|                           |                      |          |         |       |                   |                        |
|---------------------------|----------------------|----------|---------|-------|-------------------|------------------------|
| Very Strongly<br>Disagree | Strongly<br>Disagree | Disagree | Neutral | Agree | Strongly<br>Agree | Very Strongly<br>Agree |
| 1                         | 2                    | 3        | 4       | 5     | 6                 | 7                      |

- \_\_\_\_\_ 1. The Captain possesses expert knowledge and actively strives to improve that knowledge.
- \_\_\_\_\_ 2. The Captain always applies knowledge to handle nonroutine situations.
- \_\_\_\_\_ 3. The Captain invariably fails to set and enforce standards.
- \_\_\_\_\_ 4. The Captain works extremely well with others and fosters exemplary teamwork.
- \_\_\_\_\_ 5. The Captain displays unsurpassed initiative and self-confidence.
- \_\_\_\_\_ 6. The Captain superbly motivates and has the absolute respect/confidence of subordinates.
- \_\_\_\_\_ 7. The Captain is steadfastly fair and consistent in the evaluations of subordinates.
- \_\_\_\_\_ 8. The Captain exhibits inspiring loyalty, discipline, dedication, integrity, honesty, and officership.
- \_\_\_\_\_ 9. The Captain does not set the example for adherence to Air Force standards.
- \_\_\_\_\_ 10. The Captain always accepts personal responsibility and is consistently fair and objective.
- \_\_\_\_\_ 11. The Captain has a superb ability to plan, schedule, and use resources extremely efficiently.
- \_\_\_\_\_ 12. The Captain is unsurpassed in scheduling work for self and others equitably and effectively.

- 13. The Captain unwaveringly anticipates and expertly solves problems.
- 14. The Captain always fails to meet suspenses.
- 15. The Captain has an exceptional ability to make timely and accurate decisions with exacting logic.
- 16. The Captain relentlessly recognizes opportunities and unfailingly takes advantage of them.
- 17. The Captain consistently fails to retain composure in the most stressful situations.
- 18. The Captain is an unparalleled listener, speaker, and writer.
- 19. The Captain should definitely not be promoted to the rank of Major.

